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DEVELOPED BY
Safety & Environmental Services Section
Clark County School District
1700 Galleria Drive, Bldg. C
Henderson, NV 89014
CLARK COUNTY SCHOOL DISTRICT  
HAZARD COMMUNICATION PROGRAM  

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FOREWORD

The purpose of a Hazard Communication Program is to communicate potential health hazards and the safe work practices required for the use of hazardous materials in your facility. This manual is the written Hazard Communication Program for the Clark County School District. It provides a guide to the site administrator for complying with the Hazard Communication Standard, which says that employees have a RIGHT TO KNOW what chemical hazards they may face on the job and how they can protect themselves against those hazards.

Information is the heart of hazard communication, and knowledge is the most important tool of ensuring employee safety. This manual was developed for your safety and that of your co-workers. Use it. IT IS YOUR RIGHT TO KNOW.

If you need assistance with this program or have any questions regarding hazardous materials or waste management, please call the Hazardous Materials Section at 799-0990.
SUMMARY OF REQUIREMENTS

The site administrator or department head is responsible for implementing and administering the Hazard Communication Program (HCP) and assuring that each part of the HCP is followed by employees under their control and that the HCP is available to visiting workers. The responsibility for various tasks required by the HCP can be delegated to others.

The HCP has several requirements: EMPLOYEE TRAINING, HAZARDOUS MATERIALS INVENTORIES, MATERIAL SAFETY DATA SHEETS (MSDSs), LABELING, EMERGENCY RESPONSE, RECORD-KEEPING, AND UPDATING THE PROGRAM. Each requirement of the HCP is addressed in detail in the sections which follow. Each section is organized into Background Information, Applicability, Responsibilities, and Implementation. Regulatory references (Appendix A), a glossary of terms used in this manual (Appendix B), and a facility compliance inspection checklist (Appendix C) are included at the back of this manual. Extra forms required for HCP implementation are also included at the back of this manual.

Below you will find a brief checklist summarizing compliance activities. Additional copies of this checklist are included at the end of this manual. Detailed instructions for implementing each requirement of the HCP are provided in Part D of each section of this manual.

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<th>DATE</th>
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<td>MAKE TASK ASSIGNMENTS</td>
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<td>ARRANGE FOR TRAINING</td>
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<td>UPDATE INVENTORY</td>
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<td>UPDATE HCP RECORDS</td>
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SECTION 1
INTRODUCTION

A. Background

In the past, there was no way to guarantee that workers would be told about the potential chemical hazards they might face on the job. The Hazard Communication Standard was created to ensure that everyone, employer and employee alike, knows what information has to be provided to keep employees safe.

The Hazard Communication Standard states employees have a "RIGHT TO KNOW" what chemical hazards they may face on the job and how they can protect themselves against those hazards. Employers have a responsibility to provide information and training to employees. Employees have a responsibility to participate in the program by identifying potential chemical hazards before starting a job, respecting all precautions, asking questions when in doubt, and knowing in advance what could go wrong and how and where to get help.

The Occupational Safety and Health Act's (OSHA's) Hazard Communication Standard initially required chemical manufacturers and importers to evaluate the hazards of chemicals produced or imported, and to communicate this information to the product's end users through Material Safety Data Sheets (MSDSs). OSHA later expanded the program to include all employees who may be exposed to hazardous materials within the workplace and required that MSDSs be provided with hazardous materials shipments.

Employers are required to ensure that all employees are aware of potential chemical hazards in the workplace through a written Hazard Communication Program (HCP) which addresses:

1. Employee Information and Training
2. Hazardous Materials Inventories
3. Material Safety Data Sheets
4. Labeling
5. Emergency Response
6. Recordkeeping and Updating the Program

B. Applicability

The Standard applies to all full and part-time employees who may be exposed to hazardous materials in the workplace. This includes all Clark County School District (CCSD) employees: administrators, teachers, and support staff such as food service, custodial, and maintenance personnel. School laboratories are also regulated under OSHA's Laboratory Standard.
C. Responsibilities

Each site administrator is responsible for the administration of the HCP at his or her facility. CCSD's Hazardous Materials Section is responsible for the development of the written HCP, program oversight and auditing, and technical support. Each CCSD employee is responsible for understanding the potential hazards associated with materials specific to his or her job.

Because of the work load associated with Hazard Communication Standard compliance, the site administrator may delegate various HCP-related tasks. Throughout this manual, the site administrator is designated as the responsible person for implementation and administration of specific portions of the HCP. In all but a few instances, the site administrator may delegate the larger portion of a project to a designee. Whether delegated or not, however, each site administrator still retains ultimate responsibility for administration and implementation of the HCP at their facility.

D. Implementation

In order to implement this HCP, the site administrator shall do the following:

1. Read the entire manual to gain a basic understanding of the program requirements and associated responsibilities and tasks.

2. Determine whether tasks required for implementation will be assigned and make assignments as appropriate. Complete the task assignment form (Appendix D) and place in the HCP binder. Update the form as necessary.

3. Inform all employees of the location of the HCP binder and arrange for employee training as described in Section 2.

4. Develop or update the hazardous materials inventory as described in Section 3.

5. Ensure that copies of MSDSs for each hazardous material at the facility are available as described in Section 4.

6. Ensure that all containers are properly labeled as described in Section 5.

7. Ensure that:
- Newly assigned employees are trained and current employees receive additional training when new hazardous materials are used.
- New products are delivered with the proper labeling and accompanied with the appropriate MSDSs.

8. Call Hazardous Materials Section at 799-0990 if you have any questions regarding this program.
SECTION 2
EMPLOYEE INFORMATION AND TRAINING

A. Background

The Hazard Communication Standard requires that prior to assignment, employees must be informed of:

1. The requirements of the Standard;
2. Any operations in their work area where hazardous materials are present; and
3. The location of the HCP at their facility.

The Hazard Communication Standard requires that employees be trained in:

1. The methods of observation to be used to detect the presence or release of a hazardous material in the work area;
2. The physical and health hazards of the materials in the work area;
3. The measures employees can take to protect themselves from chemical hazards;
4. The details of the HCP developed by the employer; and
5. Emergency procedures for spills, fires, first aid, and waste disposal.

Information is the heart of hazard communication, and knowledge is the most important tool for ensuring employee safety. Information can be found on labels, Material Safety Data Sheets (MSDSs), or by calling the Hazardous Materials Section at 799-0990.

Training is available on video tape or through lectures provided by the Environmental Services staff. A short written self-test may accompany the video tape or lecture. This self-test is a voluntary aid to indicate the level of employee awareness and understanding at the time of training.

B. Applicability

General training requirements apply to all CCSD full- and part-time employees. There are additional training requirements which apply to personnel working in specialized areas such as science labs, auto shops, and graphic arts, and to custodial staff, and maintenance workers. These employees may be exposed to a wider variety of hazardous materials and therefore require additional training regarding the potential hazards associated with these materials. Outside contractors must be informed of the potential hazards at the site prior
to beginning work.

C. Responsibilities

The site administrator (or designee) is responsible for:

1. Arranging for employee training.
2. Maintaining training records.
3. Assisting the Hazardous Materials Section in identifying employees requiring training.

Administrative supervisors whose employees work at various sites or who use outside contractors are responsible for:

1. Arranging for training for their staff including training on hazardous materials which may be encountered at various facilities and how to use the facility's MSDSs and HCP manual.
2. Providing outside contractors with information regarding:
   a. Hazardous substances to which they may be exposed while working at a CCSD job site.
   b. Precautions they may take to lessen the possibility of exposure by using appropriate protective measures.

The Hazardous Materials Section is responsible for:

1. Assisting the site administrator in obtaining appropriate training for the site's employees.
2. Assisting the site administrator in identifying employees who require specialized training.
3. Removing unwanted or outdated hazardous materials from the facility and arranging for proper disposal.

D. Implementation

The site administrator (or designee) shall:

1. Contact Hazardous Materials Section at 799-0990 to arrange for employee training. As mentioned above, training requirements can be fulfilled through lecture or video tape presentations.
2. Ensure that all employees attend initial and periodic training sessions.

3. Ensure that all employees receiving training sign an attendance sheet (Appendix E) and file the original attendance sheet in the HCP binder and forward a copy to Hazardous Materials Section.

4. Determine, with assistance from Hazardous Materials Section, which employees require specialized training and arranges for the training.

5. Inform outside contractors of potential chemical hazards which may be encountered at the facility.

Employees may be periodically required to perform nonroutine work assignments. Prior to starting work on these projects, each employee will be given information by the project supervisor about hazards to which he/she may be exposed. This information will include:

1. Specific hazards associated with the hazardous materials
2. Measures CCSD has taken to lessen the hazards
3. Specific personal protective measures and procedures which must be utilized
4. Emergency procedures for spill, fire, and first-aid
SECTION 3
HAZARDOUS MATERIALS INVENTORIES

A. Background

The Hazard Communication Standard requires that the HCP include a list of the hazardous materials known to be present at the facility. This list may be compiled for the workplace as a whole or for individual work areas. The identity of the hazardous material on the inventory must correspond to the product name on the MSDS.

The HCP is one part of an overall hazardous materials management program. The hazardous materials inventory is also used for complying with a variety of environmental regulations. It is also useful for determining if prohibited materials (Appendix L) are present at the schools, if there are excess hazardous materials present at the facility, if the MSDSs have been obtained for all hazardous materials at the facility, and to facilitate obtaining the Hazardous Materials Storage permit as required by the Nevada State Fire Marshal Division (sect. 8).

B. Applicability

A hazardous materials inventory is required for each facility. All areas within the facility must be surveyed. The inventory shall be reviewed and updated at least annually. If operations or products change substantially during the year, the inventory shall be updated.

All hazardous materials, whether purchased by CCSD or privately, that are used during the course of work shall be inventoried; those for personal use should not be inventoried. Instructions for completion of the inventory are included with the sample inventory form in Appendix F. Examples of hazardous materials which should be inventoried are included in Appendix G.

C. Responsibilities

The site administrator is responsible for:

1. Ensuring that all hazardous materials are inventoried at the facility. The site administrator has overall responsibility for the preparation of the inventory; however, assistance may be obtained from other staff members such as from a site safety designee, a teacher, a department head, a supervisor, a custodian, or other individual in the area.
2. Ensuring that the updated inventory is submitted to Hazardous Materials Section each year.

3. Ensuring that an MSDS is on file for each hazardous material listed on the inventory. (See Section 4 for details on MSDSs.)

The Hazardous Materials Section is responsible for:

1. Modifying the inventory form as required by regulatory changes and distributing the modified form to all site administrators.

2. Specifying the inventory due date each year, based on regulatory requirements.

3. Compiling the required annual reports based on each facility's inventory and submitting the reports to the appropriate regulatory authority to obtain required permits and distributing them to the facility.

D. Implementation

1. Annually, the Hazardous Materials Section will forward the current inventory form to each school. The inventory information requirements and due date are based on the annual reporting deadlines required by various regulatory agencies.

2. The site administrator (or designee) will list all hazardous materials at the facility, including both those being used currently as well as those being stored.

3. The site administrator will forward the completed inventory to Hazardous Materials Section by the due date specified. A copy of the inventory will be kept at the facility in the HCP binder.

4. The site administrator will determine if MSDSs are available at the facility for all hazardous materials stored at the facility. If not, the site administrator will request the MSDSs from Hazardous Materials Section. (See Section 4 of this manual for details.)

5. The site administrator will ensure the inventory is updated if there is a change in operations or products used and forward a copy of the updated inventory to Hazardous Materials Section.

6. The Hazardous Materials Section will complete required
reports to obtain permits. Hazardous Materials Section will review the completed inventories to determine whether or not prohibited materials are present at the facility. If so, Hazardous Materials Section will make arrangements for collection and disposal of these materials.
SECTION 4
MATERIAL SAFETY DATA SHEETS

A. Background

The Hazard Communication Standard requires that manufacturers prepare a Material Safety Data Sheet (MSDS) for each hazardous material they produce or import and provide a copy of the MSDS with each shipment.

The MSDS is a tool designed to provide employees with information to safely work with hazardous materials. A sample blank MSDS form and two actual MSDSs are included as Appendix H. The six (6) digit number in the upper right hand corner of the first page of the MSDS is the control number assigned by the Hazardous Materials Section. All MSDSs on file are numbered. Any products bought with a Small Purchase Order (SPO) or purchasing card should have an MSDS with it; a copy of which should be forwarded to the Hazardous Materials Section so that it can be assigned a control number. Employers are required to maintain MSDSs for each hazardous material on site and make them available to employees.

A glossary of terms commonly used in MSDSs is included as Appendix K.

MSDSs for CCSD custodial products may be found in the master file maintained by the Hazardous Materials Section, and additionally in the separate MSDS binder distributed to the custodians by the Operations department.

B. Applicability

An MSDS must be maintained on site for each hazardous material listed on the site inventory. This applies to products obtained from warehouse stock, through purchase requests, or purchased with Small Purchase Orders (SPO). In some instances, generic MSDSs may be used rather than manufacturer-specific MSDSs. The Hazardous Materials Section can provide additional guidance.

C. Responsibility

The site administrator is responsible for:

1. Determining if an MSDS is on file for each hazardous material stored or used at a facility. If not, the site administrator must request the MSDS from the Hazardous Materials Section if available from the master list
(Appendix Q), OR obtain the MSDS from the manufacturer or distributor of the product.

2. Ensuring that all employees are aware of the location of MSDSs and that MSDSs are available to employees upon request.

The Employees are responsible for:

1. Forwarding MSDSs accompanying each new hazardous material to the site administrator for distribution. The employee must inform the site administrator when a new hazardous material (for which the site does not have an MSDS) is introduced into the workplace.

2. Obtaining the MSDS whenever a hazardous material is purchased using a Small Purchase Order (SPO) or Purchasing Card. If the MSDS cannot be obtained from the store where the product is purchased, the employee is responsible for notifying the site administrator or The Hazardous Materials Section so that an MSDS can be ordered.

3. Being familiar with the MSDS (or at least knowing where it can be obtained) for each hazardous substance he/she works with at the facility.

The Hazardous Materials Section is responsible for:

1. Maintaining a master file of MSDSs for hazardous materials used at all CCSD facilities and ordering and distributing MSDSs upon request.

D. Implementation

The site administrator (or designee):

1. Checks the hazardous materials inventory to ensure the MSDSs are on file at the facility.

2. Compiles a list of hazardous materials for which there is no MSDS on file and forwards the MSDS request form (Appendix I) to Hazardous Materials Section. The MSDS request form must contain the product name and any product identification numbers and manufacturer name, address, and phone number. This information may be obtained from the product's label. Where the full address or phone number is not listed on the label, include as much information as possible to enable Hazardous Materials Section to locate the product's
3. Files new and updated MSDSs. MSDS’s may be kept in the Hazard Communication Program Binder; a separate binder labeled “MATERIAL SAFETY DATA SHEETS”; or in a file drawer clearly labeled “MATERIAL SAFETY DATA SHEETS”. When a new or updated MSDS is received directly from the product manufacturer (rather than from Hazardous Materials Section), the site administrator forwards a copy of the MSDS to Hazardous Materials Section.

4. Ensures that site employees are aware of new and updated MSDSs.

5. Ensures that, when hazardous materials are purchased with Small Purchase Orders (SPO) OR Purchasing Card, an MSDS is received with the product and a copy of the MSDS is sent to Hazardous Materials Section.
SECTION 5
LABELING

A. Background

Labeling requirements rest primarily with the product manufacturer when only original containers are used. The purpose of the label is to provide important precautionary information to the product's user. However, the label contains only basic information. For detailed information, the product's user should refer to the MSDS. Under the Standard, each original container must be marked with the following information:

1. The product name (must match product identity on the MSDS).
2. Name, address, and emergency phone number of the product's manufacturer, importer, or other responsible party.
3. The physical hazards of the product (Will it explode or catch fire? Is it reactive? Is it radioactive?).
4. Any important storage or handling instructions.
5. The health hazards (Is it corrosive? Is it toxic? Is it an irritant?).
6. The basic protective clothing, equipment, and procedures that are recommended when working with the product.
7. Special warnings relating to children when such warnings are appropriate.

B. Applicability

Every hazardous material purchased or brought on site must be properly labeled.

C. Responsibility

It is the responsibility of the employee receiving hazardous materials to inspect the containers for appropriate labeling. The site administrator is responsible for ensuring that employees have received training necessary to understand labeling requirements. The site administrator is responsible for ensuring that all employees using hazardous materials are following the labeling guidelines.

D. Implementation

1. The site administrator ensures that all containers of hazardous materials are appropriately labeled and that employees are following the labeling requirements. This may be done by conducting "spot checks" of areas where hazardous materials are used or stored. When unlabeled
containers of hazardous materials are received at the site, the shipment must be refused or the containers must be labeled immediately. A sample label is shown in Appendix J.

2. The site administrator ensures that employees have attended training sessions required to understand labeling requirements (see also Section 2).

3. The site administrator requests labels from Hazardous Materials Section as required.

Where an employee transfers a small quantity of a hazardous material to a portable container for temporary use, a label is not required unless:

1. The portable container is to be used by someone other than the employee performing the transfer, or

2. The contents of the portable container will not be used in one work shift.

If either of these conditions exist, the portable container must be properly labeled with the product name and appropriate hazard warnings. Labels are available upon request from Hazardous Materials Section. A sample of an acceptable label is shown in Appendix J.
SECTION 6
EMERGENCY RESPONSE

A. Background

Basic information regarding what actions to take in the event of a spill, leak, or release of hazardous materials is presented in CCSD's Emergency Action Plan (EAP).

The action taken depends on the amount and degree of hazard associated with the material spilled and whether or not fire is involved. For example, if a pint of low toxicity, low hazard material is spilled, it can probably be safely cleaned up by Hazardous Materials Section. However, if a 5-gallon can or 55-gallon drum of relatively toxic or hazardous material is spilled, evacuation of the immediate area or the entire facility may be required until properly equipped spill response personnel arrive. Therefore, it is very important to understand the hazards of the materials with which you work.

In general, the steps to take if a hazardous materials spill, leak, or release occurs are as follows:

1. Define and isolate the problem. This may require evacuation of the immediate area or the entire facility.
2. If fire is involved, initiate fire reporting and evacuation procedures.
3. If evacuation is required, notify the Superintendent's office.
4. If it can be done so safely, contain the spill. This may involve merely uprighting a tipped container.
5. Notify Hazardous Materials Section. Hazardous Materials Section will determine whether further response from outside hazardous materials organizations will be necessary.

The CCSD's EAP describes the procedures to be followed for the release or threatened release of hazardous material to the environment and includes immediate notification procedures and mitigation procedures to minimize harmful impact to persons, property, or the environment. The EAP contains the following procedures and plans to be followed in the event of a hazardous materials release emergency:

1. Types of notifications which will be made and the parties responsible for making them. This includes notifying fire departments and appropriate District personnel. In all cases, the site administrator must notify the CCSD Hazardous Materials Section.
2. A list of all medical facilities that are available for use.

3. An evacuation plan including the steps and equipment needed to evacuate students, staff, and/or residents of the area surrounding the facility in the event of a spill or release.

4. Procedures to be followed to reduce any damage or harm to persons, property, or the environment.

5. Actions to be taken to stop any hazard caused by the spill or release of hazardous material.

The District's Emergency Action Plan is located in the Main Office at each facility.

B. Applicability

The Emergency Action Plan applies to all district facilities and personnel.

C. Responsibility

It is the responsibility of the Site Administrator to ensure that all personnel are informed of emergency response procedures, evacuation routes and procedures, and notification requirements.

D. Implementation

For implementation instructions, refer to the EAP for your facility.
SECTION 7
RECORD-KEEPING AND HCP UPDATING REQUIREMENTS

The Hazard Communication Standard requires that certain records be maintained at each facility. By properly keeping these records, the written HCP will be automatically updated. Following is a list of records which must be maintained.

1. Complete the HCP task assignments form and place in the HCP binder. If staff or assignments change, update the form. Place the new form in the binder; discard the old form.

2. Training attendance logs shall be kept in the HCP binder. A copy shall be sent to Hazardous Materials Section. These logs shall be kept in the binder for one year; after one year the logs may be discarded. Hazardous Materials Section will archive copies of these records for permanent retention.

3. OSHA regulations require that each facility have a current inventory on site at all times. When the new inventory is completed, the original is filed in the HCP binder, a copy is sent to Hazardous Materials Section, and the old inventory may be discarded. The inventory shall be updated when there is a change in operations or products and a copy of the updated inventory shall be sent to Hazardous Materials Section.

4. If Hazardous Materials Section determines that a permit is required, Hazardous Materials Section will obtain the permit and forward it to your facility. The permit shall be prominently posted in the office area and retained until superseded by a new permit.

5. The site administrator keeps records to ensure that all MSDSs have been received.

6. The site administrator files new and updated MSDSs in the HCP binder and updates the MSDS master list. When a new or updated MSDS is received directly from the product manufacturer (rather than from Hazardous Materials Section), the site administrator files one copy in the HCP binder and forwards a copy of the MSDS to Hazardous Materials Section.

7. The site administrator keeps a record of employee requests for MSDSs to ensure that the MSDS is appropriately distributed.

Additional requirements for updating the HCP include
developing a plan to ensure that:
- New employees are trained.
- New products are delivered with the proper labeling and accompanied with the appropriate MSDSs.
- Current employees are retrained when new hazardous materials are used.

The Hazardous Materials Section will continue to make video tapes available for training. Hazardous Materials Section may send out additional information which supersedes or supplements the information currently provided. The site administrator is responsible for ensuring that this material is appropriately distributed to facility staff and filed in the HCP binder.
SECTION 8
HAZARDOUS MATERIALS STORAGE PERMIT

A. Background

Under Nevada state law (NRS 477.045), a permit is required for the storage of certain hazardous materials in excess of quantities established by the Uniform Fire Code (UFC). Examples of such items are:

Corrosive liquids - 55 gallons
Flammable liquids - more than 5 gallons stored inside, or 10 gallons stored outside a building
Pesticides - any amount
Poisons - any amount

Information necessary to prepare the report (Chemical Information Sheet, Appendix N) is compiled from the Material Safety Data Sheets (MSDSs) and the Hazardous Materials Inventory from each site.

The permit is good for a period of one (1) year.

B. Applicability

The Hazardous Materials Storage Permit applies to all district facilities.

C. Responsibility

It is the responsibility of the Site Administrator to ensure all necessary information is provided to the Hazardous Materials Section and to post the permit when it is received.

It is the responsibility of the Hazardous Materials Section to compile the report and forward it to the State Fire Marshal Division for processing.

D. Implementation

Site Administrators will:
1. Ensure all inventory forms are complete.
2. Transmit the forms to the Hazardous Materials Section.
Hazardous Materials Section will:
1. Consolidate the information from the inventories to the Chemical Information Sheet.
2. Submit the report to the Nevada State Fire Marshal Division.
SECTION 9
HAZARDOUS MATERIAL DISPOSAL

A. Background

A hazardous material which is not needed, or is out of date, may no longer be disposed of by just throwing it out into the trash or dumping it down the drain.

The disposal of a hazardous material, if later deemed a hazardous waste, is strictly regulated by Federal statutes. The State Of Nevada administers a hazardous waste program which is approved by the Environmental Protection Agency and conforms to environmental statutes set forth in the Resource Conservation And Recovery Act (40 CFR).

B. Applicability

The proper disposal of hazardous materials applies to all district facilities.

C. Responsibility

It is the responsibility of the facility administrator, or his designee, to advise the Hazardous Materials Section of their disposal needs and to provide information necessary for the completion of their tasks.

It is the responsibility of the Hazardous Materials Section to pick up hazardous materials no longer wanted at district facilities, determine whether or not the material is required to be disposed of as a hazardous waste, and arrange for its proper packaging and disposal.

D. Implementation

The Site Administrator shall:
1. Notify Hazardous Materials Section when there are hazardous materials no longer needed at the facility and arrange for access to these materials.

Hazardous Materials Section shall:
1. Coordinate with site administrator or his/her designee to pick up any chemicals or products no longer needed.
2. Check with other facilities to see if they may make use of the chemicals or products, thereby recycling the
materials.
3. Determine whether or not the material meets the criteria of a hazardous waste and dispose of accordingly.
4. Maintain all manifests and paperwork associated with the disposal of the material.
REGULATORY REFERENCES

Clark County School District Policy and Regulation 3541, Safety and Loss Control.


Superfund Amendments and Reauthorization Act (Environmental Protection Agency), Title 40 Code of Federal Regulations Parts 350-372.


Nevada Revised Statutes and Nevada Administrative Codes, (NRS 232, 540, 383, 445, 513, 514, 444, 439, 477, 502, 459, and 241)


Copies of these references may be obtained from Hazardous Materials Section by calling 0990.
GLOSSARY OF TERMS

CCSD: Clark County School District (also referred to as "District").

Hazardous material: Any material which is a physical or chemical hazard.

Hazardous waste: In general, a hazardous material for which there is no longer a use and which is intended to be recycled or disposed. Hazardous wastes are defined and regulated by the Environmental Protection Agency under Title 40 Code of Federal Regulations Parts 260 through 271.

Hazardous Materials Section: The Clark County School District Hazardous Materials Section Section.

HCP: Hazard Communication Program; the program required under OSHA's Hazard Communication Standard. The HCP must include a written program, and information on employee training, MSDSs, container labeling, and emergency response.

Health hazard: A chemical which may cause acute or long-term health effects. Examples include corrosives, irritants, and carcinogens.

Incompatible: Materials which could cause dangerous reactions from direct contact with one another are described as incompatible.

Label: Notice attached to a container, bearing information concerning its contents.

MSDS: Material Safety Data Sheet; a description of the chemical and physical hazards associated with various products. The MSDS also includes spill response, fire fighting, first aid, and employee exposure limit information.

OSHA: The Occupational Safety and Health Act which forms the basis for the Hazard Communication Standard. OSHA is also sometimes used to refer to the Occupational Safety and Health Administration, the regulatory authority for regulations under the Act.

Physical hazard: A chemical or substance which presents a physical hazard such as fire, explosion, or corrosion. Examples are combustible liquids, compressed gases, explosives, flammable liquids or solids, organic peroxides, and oxidizers.

Site Administrator: In this manual, "site administrator" refers to the administrator responsible for the site (such as the school
Principal or department director). "Site administrator" also refers to an administrative supervisor when the supervisor has employees who work at numerous locations (i.e., Maintenance, Custodial, Grounds).

(See Appendix K for glossary of terms commonly used in MSDS.)
FACILITY COMPLIANCE INSPECTION CHECKLIST

This checklist is provided as a guide to assist the site administrator in determining the level of facility compliance with the OSHA Hazard Communication Standard. Use of this checklist is voluntary but includes items which will be checked by OSHA inspectors visiting your site.

1. Is the hazard communication binder in a central location?

2. Does the binder contain:
   a. A copy of the current written program?
   b. A completed task assignment form (if assignments were made)?
   c. A current training roster?
   d. A current hazardous materials inventory?
   e. Current MSDSs for all items on the inventory (and hazardous materials at the facility).

3. Have all employees had initial hazard communication training?

4. Have employees who routinely work with hazardous materials had specialized hazard communication training? Do employees receive additional training when operations or products change?

5. Are employees aware of the location of the hazard communication binder? Do they know how to obtain MSDSs for the products they use? (Several employees should be asked at random.)

6. Are employees aware that there are special handling and storage requirements for hazardous materials? (Several employees should be asked at random.)

7. Are employees aware of emergency response, spill, and first aid procedures? (Several employees should be asked at random.)

8. Are science laboratory personnel aware of the laboratory standard and CCSD laboratory safety manual? (Science teachers should be asked at random.)

9. Is the hazardous materials inventory accurate and current? (Spot check several locations.)

10. Are hazardous materials properly labeled? (Spot check several locations.)
11. Are outside contractors advised of the location of the written program, MSDSs, and chemical hazards they may encounter at the facility?

12. When new products are received, are they accompanied by MSDSs? If so, are new MSDSs filed in the binder with a copy to the Hazardous Materials Section Section? Is the MSDS table of contents updated? If not, are the MSDSs requested from the Hazardous Materials Section Section?

As mentioned in Section 1 of this manual, the hazard communication program is one part of a comprehensive hazardous materials and waste management program. Other items which should be periodically checked are listed below.

1. Is there a procedure in place to ensure that hazardous materials are routinely inspected? (Items which should be inspected include shelf life expiration dates, labels, and container integrity.)

2. Is there a procedure in place to ensure that hazardous wastes are properly managed? (For more information on hazardous waste, contact Hazardous Materials Section at 0990.)

3. Are hazardous materials properly stored? (Items which should be inspected include: flammable materials stored in locked flammable materials cabinets, acids not stored above eye level, hazardous materials are not left unattended, hazardous materials are stored by hazard class/compatibility.)

4. Are eyewash stations present where corrosives are used/stored?

5. Are fire extinguishers present where flammables are used/stored?

6. Are NFPA signs posted? (These signs are required if the facility is required to have a hazardous materials permit.)

7. Is the facility's hazardous materials permit (if required) current and posted?

8. Is adequate ventilation available where hazardous materials are used? (Check locations where hazardous materials are used, such as science labs, carpentry shops, welding operations, painting operations, and art and photo labs.)
HCP TASK ASSIGNMENTS

The following individuals have been assigned tasks as follows to ensure compliance with the OSHA Hazard Communication Standard.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Assigned to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arranging for employee training</td>
<td>____________________________</td>
</tr>
<tr>
<td>Hazardous materials inventory</td>
<td>____________________________</td>
</tr>
<tr>
<td>MSDSs</td>
<td>____________________________</td>
</tr>
<tr>
<td>Labeling</td>
<td>____________________________</td>
</tr>
<tr>
<td>Other:</td>
<td>____________________________</td>
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<td>____________________________</td>
</tr>
</tbody>
</table>

__________________________________________________________

Site Name

__________________________________________________________

Site Administrator Date
HAZARD COMMUNICATION PROGRAM
TRAINING ATTENDANCE LOG

Facility Name: ____________________________
Date: _______________________
Class/Video Tape Title: ____________________________
Class Administered By: ____________________________

<table>
<thead>
<tr>
<th>Printed Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>
INSTRUCTIONS FOR COMPLETING
THE HAZARDOUS MATERIALS INVENTORY

1. Inventories must be printed in ink (no pencil) or typewritten. Computer generated inventories must be approved prior to being submitted.

2. Facility Name: Name of your facility or school. DO NOT PUT YOUR NAME ON THIS LINE.

3. Room #: Indicate room number and class description, ie: Science rm 302.

4. Inventoried By: Printed name of the individual completing the inventory form for the room # referenced.

5. Date Completed: Date the inventory was completed.

6. Product or Chemical Name (Col. 1): Name of the product or chemical being inventoried, exactly as listed on the label. Where the product is a chemical, include its concentration.

7. Manufacturer Name, Address & Phone Number (Col. 2): The name of the manufacturer as listed on the product label. Include address and phone number if available. You may use more than one line on the inventory form if necessary!

8. Physical State (Col. 3): Indicate if the product a <S> Solid, <L> Liquid, <G> Gas, or and <A> Aerosol.

9. Quantity On Hand (Col. 4): The Maximum number of containers you will have stored at any given time during the year, and the Average amount you keep on hand during the year.

10. Container Type(Col. 5): The type of container (glass, plastic, box, cylinder, aerosol can, etc.)

11. Container Size and Units (Col. 5): The size of the container, ie: 3 gallons, 2 quart, 1 gram, etc.

12. Storage Location (Col. 6): indicate where within the room this product is stored, ie: flammable cabinet, desk, storage rm, etc.
13. Column 7 IS RESERVED FOR OFFICE USE ONLY...DO NOT WRITE IN THIS COLUMN

OFFICE:
Please check the inventory before returning to make sure all items are completed, have the facility administrator sign the Inventory Certification Form and return a copy of the inventory and Certification Form to the Hazardous Materials Section. **INCOMPLETE INVENTORIES WILL BE RETURNED!**

2. Place a copy in your Hazard Communication Program Binder.
<table>
<thead>
<tr>
<th>Product or Chemical Name (From Label)</th>
<th>Manufacturer Address &amp; Phone (From Label)</th>
<th>Physical State (S,L,G)</th>
<th>Quantities On Hand</th>
<th>Container Type</th>
<th>Size</th>
<th>Storage Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYURETHANE</td>
<td>MINWAX COMPANY, UPPER SADDLE RIVER, NJ 07458</td>
<td>L</td>
<td>1</td>
<td>CAN</td>
<td>16 OZ</td>
<td>FLAMMABLE CABINET</td>
</tr>
<tr>
<td>TURPENTINE</td>
<td>PARKS CO, SUMMERSET, MASS. 02726</td>
<td>L</td>
<td>2</td>
<td>CAN</td>
<td>32 OZ</td>
<td>FLAMMABLE CABINET</td>
</tr>
<tr>
<td>WOOD STAIN</td>
<td>CARVERS FINISHING, LA JOLLA, CA (800) 555-1212</td>
<td>L</td>
<td>2</td>
<td>CAN</td>
<td>1 QUART</td>
<td>FLAMMABLE CABINET</td>
</tr>
<tr>
<td>KRYLON SPRAY FIXATIVE</td>
<td>KRYLON-SHERWIN WILLIAMS, SOLOM, OH 44139</td>
<td>L</td>
<td>3</td>
<td>CAN</td>
<td>16 OZ</td>
<td>FLAMMABLE CABINET</td>
</tr>
</tbody>
</table>

Use More Than 1 Line if Necessary
1. Inventories must be printed in ink (no pencil) or typewritten. Computer generated inventories must be approved prior to being submitted.

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FACILITY OFFICE:
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2. Place a copy in your Hazard Communication Program Binder.
<table>
<thead>
<tr>
<th>Product or Chemical Name</th>
<th>Catalogue or Product #</th>
<th>Manufacturer Address &amp; Phone</th>
<th>Physical State (S,L,G)</th>
<th>Quantities On Hand</th>
<th>Container Size</th>
<th>Storage Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>S-1080</td>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>L</td>
<td>5</td>
<td>GALLON</td>
<td>FLAMMABLE STORAGE</td>
</tr>
<tr>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>4-1294</td>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>L</td>
<td>6</td>
<td>QUART</td>
<td>FLAMMABLE STORAGE</td>
</tr>
<tr>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>364-8034</td>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>L</td>
<td>2</td>
<td>GALLON</td>
<td>STORAGE CABINET</td>
</tr>
<tr>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>364-8034</td>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>L</td>
<td>3</td>
<td>GALLON</td>
<td>STORAGE CABINET</td>
</tr>
<tr>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>146-2247</td>
<td>AB DICK COMPANY, CHICAGO, IL 60648</td>
<td>L</td>
<td>3</td>
<td>GALLON</td>
<td>STORAGE CABINET</td>
</tr>
</tbody>
</table>
EXAMPLES OF MATERIALS TO BE INVENTORIED

**Custodial Supplies**

- Disinfectant soaps
- Cleansers
- Ammonia
- Glass Cleaner
- Paints (latex, enamel, spray)
- Toilet bowl cleaner
- Insecticides
- Adhesives
- Board cleaner
- sulfates,

**Kitchen Supplies**

- Disinfectants and
- Ammonia
- Insecticides

**Chemistry Labs**

- Solvents
- Nitrates, nitrites,
- sulfites
- Acids and bases
- Flammable and combustible materials (such as
- methanol, ethanol)
- Poisons
- Oxidizers

**Office & General Classroom**

- acetone,
- White-Out
- Duplicating fluid
- Rubber cement
- Rubber cement thinner

**Industrial Arts**

- Waste and new motor oil
- Paints and thinners
- Solvents
- Welding rod
- Compressed gases
- Stain (such as wood
- Adhesives and resins
- Hair spray, nail polish
  (when used in
  teaching purposes)
- Contact cleaner

This list provides some examples of hazardous materials which may be found in various classroom settings. Any material with a hazard warning (such as "flammable," "combustible," "keep out of reach of children," "corrosive," "use with ventilation") should be reported unless the material is strictly for personal use. When completing the inventory form, be sure to include as much product name and manufacturer information as possible.
Material Safety Data Sheet

May be used to comply with:
OSHA’s Hazard Communication Standard
29 CFR 1910.1200 Standard must be consulted for specific requirements

IDENTITY (As Used on Label and List)

Section I

Manufacturer’s Name
Emergency Telephone Number

Address (Number, Street, City, State and Zip Code)
Telephone Number for Information

Date Prepared
Signature of Preparer (Optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))
OSHA PEL
ACGIH TLV
Other Limits
Recommende

Section III — Physical/Chemical Characteristics

Boiling Point
Specific Gravity (H₂O = 1)

Vapor Pressure (mm Hg)
Melting Point

Vapor Density (Air = 1)
Flammability Rate

Solubility in Water

Appearance and Odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)
Flammable Limits

LEL
UEL

Extinguishing Media

Special Fire Fighting Procedures

Unusual Fire and Explosion Hazards

(OSHA 174, Sept. 1985)
Section V — Reactivity Data

Stability

Unstable

Incompatible Materials (Materials to Avoid)

Hazardous Decomposition or Byproducts

Hazardous Polymerization

May Occur

Will Not Occur

Section VI — Health Hazard Data

Routes of Entry

Inhalation?

Skin?

Ingestion?

Health Hazards (Acute and Chronic)

Carcinogenicity

NTP?

IARC Monographs?

OSHA Regulated?

Signs and Symptoms of Exposure

Medical Conditions Generally Aggravated by Exposure

Emergency and First Aid Procedures

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Waste Disposal Method

Precautions to Be Taken in Handling and Storing

Other Precautions

Section VIII — Control Measures

Respiratory Protection (Specify Type)

Ventilation

Local Exhaust

Special

Mechanical (General)

Other

Protective Gloves

Eye Protection

Other Protective Clothing or Equipment

Work/Hygiene Practices
Date of Preparation: 03/16/90
Kodak Accession Number: 449571

PRODUCT INFORMATION

Product Name: KODAK MICRODOL-X Developer
Formula: Solid Mixture
Kodak Catalog Number(s): CAT 169 1955 - To Make 4 Ounces; CAT 196 9690 - To Make 1 Quart; CAT 196 9724 - To Make 1 Gallon; CAT 156 5647 - To Make 5 Gallons; CAT 123 0044 - To Make 1 Quart; CAT 123 0689 - To Make 128 Ounces
Mixture Number: 5642
Kodak's Hazard Rating Codes: R: 1 S: 2 F: 0 C: 0

Manufacturer/Supplier:
Eastman Kodak Company
343 State Street
Rochester, New York 14650
USA
For Emergency Information: (716) 722-5151
For other purposes, call the Marketing and Distribution Center in your area.

COMPONENT INFORMATION

<table>
<thead>
<tr>
<th>Weight Percent</th>
<th>CAS Number</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium sulfite</td>
<td>70-80</td>
<td>7757-83-7</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>20-30</td>
<td>7647-14-5</td>
</tr>
<tr>
<td>*p-Methylaninophenol sulfate</td>
<td>1-5</td>
<td>55-55-0</td>
</tr>
<tr>
<td>Boric anhydride</td>
<td>LT 1</td>
<td>1303-86-2</td>
</tr>
<tr>
<td>Sodium hexametaphosphate</td>
<td>LT 1</td>
<td>10124-56-8</td>
</tr>
</tbody>
</table>

*Principal Hazardous Component(s)

PHYSICAL DATA

Appearance and Odor: Tan colored powder; odorless
Melting Point: Not Available
Vapor Pressure: Negligible
Evaporation Rate (n-butyl acetate = 1): Negligible
Vapor Density (Air = 1): Not Applicable
Volatile Fraction by Weight: Negligible
Specific Gravity (H2O = 1): Not Available
pH: Not Applicable
Solubility in Water (by Weight): Appreciable

GT = Greater than; LT = Less than

C-0095.000E
90-0509
FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Noncombustible
EXTINGUISHING MEDIA: Use appropriate agent for surrounding fire.
SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus and protective clothing.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Fire or excessive heat may cause production of hazardous decomposition products.

REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY: Strong acids
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce Hydrogen chloride gas and oxides of sulfur.
HAZARDOUS POLYMERIZATION: Will not occur.

TOXICOLOGICAL PROPERTIES

EXPOSURE LIMITS:
Component: Boric anhydride
ACGIH TLV: 10mg/m³ - TWA (ACGIH 1989-1990)
OSHA PEL: 10mg/m³ - Total Dust; 5mg/m³ - respirable fraction - TWA

EXPOSURE EFFECTS:
Inhalation: High concentrations of dust may cause upper respiratory tract irritation.
Eyes: Causes eye irritation.
Skin: Prolonged or repeated skin contact can cause skin irritation. May cause an allergic skin reaction.
Ingestion: Expected to be a low ingestion hazard.

TOXICITY DATA:

<table>
<thead>
<tr>
<th>TEST</th>
<th>SPECIES</th>
<th>RESULT(2)</th>
<th>CLASSIFICATION(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral LD50</td>
<td>Rat</td>
<td>0.5 - 5.0 g/kg</td>
<td>Slightly toxic</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>Guinea Pig</td>
<td>Slight to moderate</td>
<td></td>
</tr>
</tbody>
</table>

PROTECTION AND PREVENTIVE MEASURES

VENTILATION: Good ventilation* should be sufficient. Supplementary ventilation or respiratory protection may be needed in special circumstances.

*Typically, 10 room volumes per hour is considered good general ventilation; ventilation rates should be matched to conditions of use.
SKIN AND EYE PROTECTION: Impervious gloves should be worn. Safety glasses with side shields should be worn. The routine use of a non-alkaline (acid) type of hand cleaner will help minimize the possibility of allergic skin reaction.

STORAGE AND DISPOSAL

SPECIAL STORAGE AND HANDLING PRECAUTIONS: Keep container tightly closed and away from acids.

SPILL, LEAK, AND DISPOSAL PROCEDURES: Flush material to sewer with large amounts of water. Discharge, treatment, or disposal may be subject to federal, state, or local laws.

FIRST AID

Inhalation: Remove from exposure, treat symptomatically, and get medical attention if symptoms persist.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

Skin: Flush skin with plenty of soap and water. If skin irritation or an allergic skin reaction develops, get medical attention. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Drink 1-2 glasses of water. Seek medical attention.

ENVIRONMENTAL EFFECTS

This environmental effects summary is written to assist in addressing emergencies created by an accidental spill, which might occur during the shipment of this product, and in general, it is not meant to address discharges to sanitary sewers or publicly owned treatment works.

Some laboratory test data and published data are available for the major components of this formulation. Although this product, as such, has not been tested for environmental effects, the data, mentioned above, have been used to provide the following estimates of potential environmental impact, in the event of an accidental spill: (2-7)

This chemical is expected to have a low biological oxygen demand, and it is expected to cause little oxygen depletion in aquatic systems if discharged directly to the environment without treatment. It is expected to have a high potential to affect aquatic organisms and secondary waste treatment microorganisms and a low potential to affect the germination and growth of some plants. The organic component of this chemical formulation is biodegradable. It is not likely to bioconcentrate. The direct instantaneous discharge to a receiving body of water of an amount of this chemical formulation which will rapidly produce, by dilution, a final concentration of 1 mg/L or less is not expected to cause an adverse environmental effect.
However, after dilution with a large amount of water, followed by secondary waste treatment, the chemicals in this formulation are not expected to have any adverse environmental impact.

TRANSPORTATION

For Transportation information regarding this product, please phone the Eastman Kodak Distribution Center nearest you: Rochester, NY (716) 588-9293; Oak Brook, IL (312) 954-6000; Chamblee, GA (404) 455-0123; Dallas, TX (214) 241-1611; Whittier, CA (213) 693-5222; Honolulu, HI (808) 833-1661.

REFERENCES


PREPARATION INFORMATION

Health and Environment Laboratories
Eastman Kodak Company
Rochester, New York 14652-3615

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.
MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 3 Flammability = 0 Reactivity = 0
HMIS RATING: Health = 3 Flammability = 0 Reactivity = 0

SECTION I - IDENTITY AND MANUFACTURER'S INFORMATION
Manufacturer's Name: HILLYARD INDUSTRIES
Address: 302 North Fourth Street
St. Joseph, MO 64501
Emergency Telephone No.: (800)-424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.)
Product Name: RENOVATOR
Date Prepared: May 4, 1994
Prepared by: Regulatory Affairs Department
Other information calls: (816)233-1321(Ext. 303)

SECTION II - INGREDIENTS/IDENTITY INFORMATION
Components
(Specific Chemical Identity:
Common Name(s):
Ethanolamine (1)
Sodium metasilicate (2)
Water
Benzy alcohol (3)
Sulfonated oleic acid, potassium salt
(CAS# OSHA PEL ACGIH TLV OTHER LIMITS RECOMMENDED %
141-43-5 3 ppm 3 ppm N/A 4-6
6834-92-0 not not 2 mg/m³ 5-10
7732-18-5 none established N/A
100-51-6 none established N/A
68609-93-8 none none N/A
(1) Regulated by OSHA and the following states: CT, FL, IL, LA, MA, NJ, PA, RI.
(2) Exposure may be elevated as ceiling. For Sodium hydroxide per OSHA: PEL = 2 mg/m³ or TLV = 2 mg/m³.
(3) Regulated by the following states: PA, FL, MA.

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS
Boiling Point: 194°F
Vapor Pressure (mm Hg): 17.1
Vapor Density (AIR = 1): 0.7
Solubility In Water: appreciable
pH (concentrate): 13-14
Specific Gravity (H₂O = 1): 25°C = 1.06 & 39°C = 1.05
Percent Volatile by Volume (%): 90.8
Evaporation Rate (ethyl ether = 1): less than 1
Appearance and Odor: violet liquid, non-objectionable odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA
Flash point: None to boiling (T.C.C.)
Extinguishing Media: Water, dry chemical, alcohol foam or carbon dioxide.
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: N/A
Flammable Limits: LEL = N/A UEL = N/A

SECTION V - PHYSICAL HAZARDS
Stability: Stable
Conditions to Avoid: N/A
Incompatibility (Materials to Avoid): Oxidizing materials
Hazardous Decomposition Products or Byproducts: None known to manufacturer
Hazardous Polymerization: Will not occur
Conditions to Avoid: N/A

SECTION VI - HEALTH HAZARD DATA
Routes of entry: Inhalation? Yes Skin? Yes Ingestion? Yes
HEALTH HAZARDS (1. Acute and 2. Chronic)
1. Concentrate is corrosive to all body tissue with which it comes in contact.
2. Prolonged and repeated exposure to the skin may produce dermatitis. Inhalation of spray mist may result in varying degrees of irritation.
Chemical listed as Carcinogen or Potential Carcinogen:
National Toxicology Program = No I.A.R.C. Monographs = No OSHA = No
This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater or equal to 0.1%.

H-8
SECTION VI — HEALTH HAZARD DATA cont.
Signs and Symptoms of Exposure: Concentrated product may produce skin and eye burns. Ingestion may produce burns of mucous membranes of the mouth, throat, esophagus and stomach.
Medical Conditions Generally Aggravated by Exposure: Skin problems such as industrial dermatitis.
Emergency and First Aid Procedures: In case of contact immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes; remove contact lenses then flush eyes with water again. Wash clothing before reuse and thoroughly clean contaminated shoes. If swallowed do not induce vomiting; immediately give large amounts of water and CALL A PHYSICIAN, hospital emergency room or poison control center. Inhalation: remove victim to fresh air, if respiratory tract remains irritated call a physician.

SECTION VII — PRECAUTIONS FOR SAFE HANDLING AND USE
Steps To Be Taken In Case Material Is Released Or Spilled: Wear/use appropriate protective equipment. Small spills: Take up with wet vac, mop or non-combustible absorbent material and place into containers for later disposal. Rinse affected area thoroughly with water. Large spills: Dike far ahead of liquid spill for later pick-up and disposal.
Waste Disposal Method: Disposal of concentrate regulated by Federal Resource Conservation and Recovery Act as a corrosive waste (40 CFR 261.22). Disposal of regulated quantities should be neutralized at a permitted facility in accordance with federal/state/local regulations (corrosive waste - pH concentrate = 13-14). Waste from normal product use may be sewered to public-owned treatment works in compliance with applicable federal, state and local pretreatment requirements.
Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Triple rinse package (or equivalent). Then offer for recycling or reconditioning.
Other Precautions: Spray mist may produce respiratory irritation or damage without proper ventilation. Do not use with fog mist sprayer without respiratory protection. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR Part 372.

SECTION VIII — CONTROL MEASURES:
Respiratory Protection (Specify Type): Ventilate to keep air below TLV on metaisicate and monoethanolamine.
Ventilation:
Local Exhaust = Recommended  Mechanical (General) = Recommended  Special = N/A  Other = N/A
Protective Gloves: Impervious gloves when working with concrurate
Eye Protection: Chemical safety goggles when working with concentrate
Other Protective Clothing or Equipment: Impervious to water and alkaline liquids where contact with concentrate is a concern.
Work / Hygienic Practices: Wash thoroughly after handling.

SECTION IX — TRANSPORTATION INFORMATION:
Applicable regulations: DOT = No; IMCO = No; IATA = No
Proper shipping name: Cleaning compound
UN No.: not applicable  Limited Qty.: not applicable  Hazard Class: not applicable
Labels required: not required  DOT Exception: not applicable
EPA Hazardous waste/number code: not listed
Hazardous waste characteristics:
Ignitability = not applicable; Corrosivity = yes; Reactivity = not applicable

DISCLAIMER OF WARRANTIES
NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY NATURE ARE MADE WITH RESPECT TO THE PRODUCT(S) OR INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET.
The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate.
THE BUYER OR USER ASSUMES ALL RISKS ASSOCIATED WITH THE USE, MISUSE OR DISPOSAL OF THIS PRODUCT. THE BUYER OR USER IS RESPONSIBLE TO COMPLY WITH ALL FEDERAL, STATE OR LOCAL REGULATIONS CONCERNING THE USE, MISUSE OR DISPOSAL OF THESE PRODUCTS.
**MSDS REQUEST FORM**

Facility Name _________________________________  Date ___________
Requested by __________________________________  Phone __________

<table>
<thead>
<tr>
<th>Manufacturer’s Name</th>
<th>Address</th>
<th>Phone</th>
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</table>

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
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<tbody>
<tr>
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</tbody>
</table>

RETURN THIS FORM TO THE HAZARDOUS MATERIALS SECTION.
SAMPLE LABELS

CHEMICAL ID LABEL

Trade Name ________________

Hazard: □ Fire □ Health □ Reactive

Warning ____________________

MSDS # ___________
**MSDS TERMS**

**Absolute:** A chemical substance that is not mixed; pure.

**Acute Effect:** Adverse effect on a human or animal that has severe symptoms developing rapidly and coming quickly to a crisis.

**Aerosol:** A fine aerial suspension of particles sufficiently small in size to confer some degree or stability from sedimentation (e.g., smoke or fog).

**Air-Line Respirator:** A respirator that is connected to a compressed breathable air source by a hose of small inside diameter. The air is delivered continuously or intermittently in a sufficient volume to meet the wearer's breathing requirements.

**Air-Purifying Respirator:** A respirator that uses chemicals to remove specific gases and vapors from the air or that uses a mechanical filter to remove particulate matter. An air-purifying respirator must be used only when there is sufficient oxygen to sustain life and the air contaminant level is below the concentration limits of the device.

**Allergic Reaction:** An abnormal physiological response to chemical or physical stimuli.

**Anesthetic:** A chemical that causes a total or partial loss of sensation. Overexposure to anesthetics can cause impaired judgement, dizziness, drowsiness, headache, unconsciousness, and even death. Examples include alcohol, paint remove, and degreasers.

**Appearance:** A description of a substance at normal room temperature and normal atmospheric conditions. Appearance includes the color, size, and consistency of a material.

**Asphyxiant:** A vapor or gas that can cause unconsciousness or death by suffocation (lack of oxygen).

**Atmosphere-Supplying Respirator:** A respirator that provides breathable air from a source independent of the surrounding atmosphere. There are two types: the air line respirator and self-contained breathing apparatus.

**Boiling Points:** The temperature at which a liquid changes to a vapor state at a given pressure. The boiling point usually is expressed in degrees Fahrenheit at sea level pressure.
"C" or Ceiling: The maximum allowable human exposure limit for an airborne substance; not to be exceeded even momentarily.

Carcinogen: A substance or agent capable of causing or producing cancer in mammals.

Central Nervous System: The brain and spinal cord. These organs supervise and coordinate the activity of the entire nervous system. Sensory impulses are transmitted into the central nervous system and motor impulses are transmitted out.

Chronic Effect: An adverse effect on the human or animal body, with symptoms that develop slowly over a long period of time or that recur frequently.

Combustible: A term used to classify certain liquids that will burn on the basis of flash points.

Common Name: Any means used to identify a chemical other than its chemical name (e.g., code name, code number, trade name, brand name, or generic name).

Conditions to Avoid: Conditions encountered during handling or storage that could cause a substance to become unstable.

Container: Any bag, barrel, bottle, box, can, cylinder, drum, storage tanks, or the like that contains a hazardous material.

Corrosive: A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. In general, hazardous materials with a pH below 2 or above 12 (at normal room temperature) are corrosive.

Density: The mass (weight) per unit volume of a substance. For example, lead is much more dense than aluminum.

Depressant: A substance that reduces a bodily functional activity or an instinctive desire, such as appetite.

Dike: A barrier constructed to control or confine hazardous substances and prevent them from entering sewers, ditches, streams, or other flowing waters.

Dry Chemical: A powdered fire-extinguishing agent.

Evaporation Rate: The rate at which a material will evaporate when compared to the known rate of evaporation of a standard material.

 Explosive: A chemical that causes a sudden, almost instantaneous
release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

Eye Protection: Recommended safety glasses, chemical splash goggles, face shields, etc., to be used when handling a hazardous material.

Flammable Liquid: A flammable liquid is a liquid with a flash point below 100°F.

Flash Point: The temperature at which a liquid will give off enough flammable vapor to ignite. There are several flash point test methods, and flash points may vary for the same material depending on the method used, so the test method is indicated when the flash point is given.

Fume: A solid condensation particle of extremely small diameter, commonly generated from molten material.

Hand Protection: Specific type of gloves or other hand protection required to prevent harmful exposure to hazardous materials.

Hazard Warning: Words, pictures, symbols, or combination thereof presented on a label or other appropriate form to inform of the presence of various materials.

Ignitible: Capable of being set afire.

Insoluble: Incapable of being dissolved in a liquid.

Irritant: A chemical, which is not corrosive, that causes a reversible inflammatory effect on living tissue by chemical action at the site of contact.

LC: Lethal concentration is the concentration in air of a substance being tested that will kill the test subjects.

LD: Lethal dose is the quantity of a substance being tested that will kill the test subjects.

LD₅₀: A single does of material expected to kill 50 percent of a group of test animals. The LD₅₀ dose is usually expressed as milligrams or grams of material per kilogram of animal body weight (mg/kg or g/kg). The material may be administered by mouth or applied to the skin.

LEL or LFL: Lower explosive limit or lower flammable limit, of a vapor or gas. The lowest concentration that will produce a flash of fire when an ignition source is present.
**Local Exhaust:** A ventilation system for capturing and exhausting contaminants from the air at the point where the contaminants are produced.

**Melting Point:** The temperature at which a solid substance changes to a liquid state.

**mg/m³:** Milligrams of contaminant per cubic meter of air.

**Mutagen:** A substance or agent capable of altering the genetic material in a living cell.

**Narcosis:** A state of stupor, unconsciousness, or arrested activity produced by the influence of narcotics or other chemicals.

**Neurotoxin:** A material that affects the nerve cells and may produce emotional or behavioral abnormalities.

**Neutralize:** To eliminate potential hazards by inactivating strong acids, caustics, or oxidizers.

**Nonflammable:** Not easily ignited, or if ignited, will not continue to support combustion without a source of heat nearby.

**Oxidizer:** A chemical other than a blasting agent or explosive that initiates or promotes combustion in other materials, causing fire either by itself or through the release of oxygen or other gases.

**PEL:** Permissible Exposure Limit; an exposure limit established by OSHA. May be a time a time-weighted average (TWA) limit for an eight-hour exposure or a maximum concentration exposure limit.

**pH:** The symbol relating to the hydrogen ion concentration to that of a given standard solution. A pH of 7 is neutral.

**ppm:** Parts per million; a unit for measuring the concentration of a gas or vapor in air - parts of the gas vapor in a million parts of air. Also used to indicate the concentration of a particular substance in a liquid or solid.

**Pyrophoric:** A chemical that will ignite spontaneously in air at a temperature of 130° F or below.

**Reactivity:** A description of the tendency of a substance to undergo chemical reaction with the release of energy.

**Reproductive Toxin:** Substances that affect either male or female
reproductive systems and may impair the ability to have children.

**Respiratory Protection:** Devices that will protect the wearer's respiratory system from overexposure by inhalation to airborne contaminants.

**Routes of Entry:** The means by which material may gain access to the body: inhalation, ingestion, skin absorption, or injection.

**Self-Contained Breathing Apparatus (SCBA):** A respiratory protection device that consists of a supply or a means of respirable air, oxygen, or oxygen-generating material, carried by the wearer.

**Sensitizer:** A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

**Specific Gravity:** The weight of a material compared to the weight of an equal volume of water.

**Stability:** An expression of the ability of the material to remain unchanged. For MSDS purposes, a material is stable if it remains in the same form under expected and reasonable conditions of storage or use.

**Systemic Poison:** A poison that spreads throughout the body, affecting all body systems and organs. Its adverse effect is not localized on one spot or area.

**Target Organ Toxins:** A toxic substance that attacks a specific organ of the body. For example, overexposure to carbon tetrachloride can cause liver damage.

**TLV:** Threshold Limit Value, a term used to express the airborne concentration of a material to which nearly all persons can be exposed day after day without adverse effects. PELs are similar but are included in the regulations; TLVs are recommended levels.

**Toxic Substance:** A substance that can cause acute or chronic injury to the human body, or which is suspected of being able to cause diseases or injury under some conditions.

**Vapor Density:** The weight of a vapor or gas compared to the weight of an equal volume of air.
<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>REASON FOR RESTRICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylonitrile</td>
<td>OSHA Listed Carcinogen</td>
</tr>
<tr>
<td>4-Aminodiphenyl</td>
<td>OSHA &amp; ACGIH Listed Carcinogen</td>
</tr>
<tr>
<td>2-Acetylaminofluorene</td>
<td>OSHA Listed Carcinogen</td>
</tr>
<tr>
<td>Ammonium Perchlorate</td>
<td>Explosive</td>
</tr>
<tr>
<td>Arsenic Compound (any)</td>
<td>Poison</td>
</tr>
<tr>
<td>Arsenic Powder</td>
<td>Poison</td>
</tr>
<tr>
<td>Arsenic Trioxide</td>
<td>Known human carcinogen, highly toxic</td>
</tr>
<tr>
<td>Asbestos</td>
<td>Regulated human carcinogen</td>
</tr>
<tr>
<td>Asbestos in friable form</td>
<td>Known human carcinogen</td>
</tr>
<tr>
<td>Barium Chloride</td>
<td>Severely toxic; 0.8 gram fatal dose</td>
</tr>
<tr>
<td>Benzene</td>
<td>Known human carcinogen</td>
</tr>
<tr>
<td>Benzidine</td>
<td>OSHA Listed Carcinogen</td>
</tr>
<tr>
<td>Bouin's Solution</td>
<td>25% Formaldehyde, suspected carcinogen</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Positive animal carcinogen, teratogen &amp; mutagen; known human carcinogen, toxic if inhaled or swallowed</td>
</tr>
<tr>
<td>Cadmium Chloride</td>
<td>Known human carcinogen</td>
</tr>
<tr>
<td>Cadmium Nitrate</td>
<td>Known human carcinogen, highly toxic, flammable</td>
</tr>
<tr>
<td>Cadmium Powder</td>
<td>Poison</td>
</tr>
<tr>
<td>Cadmium Salts</td>
<td>Poison</td>
</tr>
<tr>
<td>Cadmium Sulfate</td>
<td>Highly toxic, positive animal carcinogen, bioaccumulative in all organisms major ingredient is picric acid</td>
</tr>
<tr>
<td>Carbon Tetrachloride</td>
<td>Nephrotoxin and hepatotoxin, suspect human carcinogen (OSHA says known carcinogen), absorbs through skin</td>
</tr>
<tr>
<td>Chloretone</td>
<td>Regulated as a drug in many states; highly addictive, toxic</td>
</tr>
<tr>
<td>Chloroform</td>
<td>Suspected human carcinogen, may cause cardiac arrhythmias</td>
</tr>
<tr>
<td>bis-Chloromethyl Ether</td>
<td>OSHA &amp; ACGIH Listed Carcinogen</td>
</tr>
<tr>
<td>Chromic Sulfuric Acid</td>
<td>Positive animal human carcinogen; contains chromium trioxide, a known human carcinogen</td>
</tr>
<tr>
<td>Chromium</td>
<td>Known human carcinogen as dust or fume</td>
</tr>
<tr>
<td>Chromium Nitrate</td>
<td>Known human carcinogen</td>
</tr>
<tr>
<td>Chromium Trioxide</td>
<td>Known human carcinogen</td>
</tr>
<tr>
<td>Colchicine</td>
<td>Highly toxic, 2/100 gram potentially fatal</td>
</tr>
</tbody>
</table>
CLARK COUNTY SCHOOL DISTRICT
PROHIBITED CHEMICAL LISTING

CHEMICAL NAME

Collodion
1,2-dibromo-3-chloropropane
3,3-Dichlorobenzidine (and salts)
4-Dimethylaminoazobenzene
Dimethyl amine
1,4 Dioxane
Estrone
Ethyl Acetate
Ethylene Dibromide
Ethyleneimine
Ethylene Oxide
Explosives and ammunition
Fisher-Fresh Concentrate

Formaldehyde

Formic Acid
Glazes with lead and cadmium
Hydrazine (anhydrous)
Hydrocyanic Acid
Hydrofluoric Acid
Lead arsenate
Methyl chloromethyl ether
2-Methoxy Ethanol
Nickel carbonyl
Nickel powder
4-Nitrobenzyl
1-Naphthylamine & Salts
2-Naphthylamine & Salts
alpha-Naphthylamine
beta-Naphthylamine
N-Nitrosodimethylamine
Oleum (32 Molar sulphuric acid)

REASON FOR RESTRICTION

Contains 70% ethyl ether
OSHA Listed Carcinogen
OSHA Listed Carcinogen
OSHA Listed Carcinogen
Acute toxin
Known carcinogen, may explode, high fire risk, absorbs through skin
Known carcinogen
Fire & explosion risk, toxic by inhalation and skin absorption
Known carcinogen, absorbs through skin
OSHA Listed Carcinogen
OSHA Listed Carcinogen
Explosive
Contains formaldehyde, a suspected human carcinogen and known animal
carcinogen
Known animal carcinogen and OSHA listed human carcinogen; poison; may
cause allergic reaction
Explosion hazard upon aging
Toxic, suspected carcinogens
Flammable, acute toxin, suspected human carcinogen
Extremely toxic
Extremely corrosive with no outward sign of burn
High toxicity
OSHA Listed Carcinogen
Possible teratogen, absorbed through skin
Known human carcinogen
Acute toxin
OSHA Listed Carcinogen
Known human carcinogen
Known human carcinogen
OSHA Listed Carcinogen
OSHA Listed Carcinogen
OSHA Listed Carcinogen
Extremely corrosive, causes severe burns
<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>REASON FOR RESTRICTION</th>
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<tbody>
<tr>
<td>Phosphorus</td>
<td>Extremely reactive, very toxic when burned, can cause very serious skin burns</td>
</tr>
<tr>
<td>Picric Acid</td>
<td>Extremely reactive; may be explosive</td>
</tr>
<tr>
<td>Potassium Cyanide</td>
<td>Extremely poisonous</td>
</tr>
<tr>
<td>Progesterone</td>
<td>Known human carcinogen</td>
</tr>
<tr>
<td>beta-Propiolactone</td>
<td>OSHA Listed Carcinogen</td>
</tr>
<tr>
<td>Pyrogallol</td>
<td>Poison, fatal dose (adult) is 2 grams, may be absorbed through the skin</td>
</tr>
<tr>
<td>Radioactive Materials</td>
<td>Carcinogenic, teratogenic</td>
</tr>
<tr>
<td>Rhodamine B</td>
<td>Poison, positive animal carcinogen, suspected human carcinogen, avoid all skin contact</td>
</tr>
<tr>
<td>Sodium Arsenite</td>
<td>Suspected carcinogen, acute toxin, deadly poison</td>
</tr>
<tr>
<td>Sodium Cyanide</td>
<td>Poison</td>
</tr>
<tr>
<td>alpha-Terpinol</td>
<td>Tumorigenic effects in animals, may induce</td>
</tr>
<tr>
<td>Testosterone Propionate</td>
<td>Positive animal carcinogen, suspect human carcinogen, may affect reproductive system abortions</td>
</tr>
<tr>
<td>2,4,6-Trinitrotoluene (TNT)</td>
<td>Explosive, suspected carcinogen</td>
</tr>
<tr>
<td>Vinyl Chloride</td>
<td>OSHA Listed Carcinogen</td>
</tr>
<tr>
<td>Zinc Chromates</td>
<td>Known human carcinogen (ACGIH)</td>
</tr>
<tr>
<td>CHEMICAL NAME</td>
<td>REASON FOR RESTRICTION</td>
</tr>
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<td>---------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>Suspected carcinogen, highly flammable</td>
</tr>
<tr>
<td>Acetamide</td>
<td>Suspected animal carcinogen</td>
</tr>
<tr>
<td>Acrylamide</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>AITCH-TU-ESS Cartridges</td>
<td>Contains asbestos and generates explosive and toxic gases</td>
</tr>
<tr>
<td>Aldrin</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Allyl chloride</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Ammonium Dichromate</td>
<td>May decompose to chromium (III), a known human carcinogen</td>
</tr>
<tr>
<td>Ammonium Nitrate</td>
<td>Explosive if heated under confinement</td>
</tr>
<tr>
<td>Aniline</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Aniline hydrochloride</td>
<td>Suspected carcinogen, toxic by ingestion, inhalation, and skin absorption</td>
</tr>
<tr>
<td>Anisidine (o-, p-isomers)</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Antimony</td>
<td>May explode when subjected to high heat</td>
</tr>
<tr>
<td>Barium Hydroxide</td>
<td>Highly toxic neurotoxin</td>
</tr>
<tr>
<td>Barium Nitrate</td>
<td>Poison, strong oxidant, highly toxic to eyes</td>
</tr>
<tr>
<td>Benedict Solution</td>
<td>Corrosive, suspected carcinogen</td>
</tr>
<tr>
<td>Benzo(a)pyrene</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Benzoyl Peroxide</td>
<td>Will explode spontaneously then dry</td>
</tr>
<tr>
<td>Beryllium as Be</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Bromine</td>
<td>Poison, powerful oxidizer</td>
</tr>
<tr>
<td>Bromoform</td>
<td>Toxic by inhalation, suspected carcinogen</td>
</tr>
<tr>
<td>iso-Butanol</td>
<td>Suspected carcinogen, highly flammable</td>
</tr>
<tr>
<td>sec-Butanol</td>
<td>May form explosive hydroperoxides</td>
</tr>
<tr>
<td>tert-Butanol</td>
<td>Suspected carcinogen &amp; mutagen, highly flammable</td>
</tr>
<tr>
<td>1,3-Butadiene</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Butyric Acid</td>
<td>Suspected carcinogen &amp; mutagen</td>
</tr>
<tr>
<td>Caffeine</td>
<td>Very toxic, 1 grain may be life threatening</td>
</tr>
<tr>
<td>Calcium chromate</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Calcium Fluoride</td>
<td>Mutagenic effects in animals, poison</td>
</tr>
<tr>
<td>Carbol Fuchsin</td>
<td>Suspect animal carcinogen &amp; mutagen</td>
</tr>
<tr>
<td>Carbon Disulfide</td>
<td>Poison, explosive, may be fatal if inhaled, flash point below room temperature</td>
</tr>
<tr>
<td>Chlordane</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Chlorinated Camphene</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Chloromethyl methyl ether</td>
<td>Suspected carcinogen</td>
</tr>
</tbody>
</table>
**CHEMICAL NAME**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Reason for Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-Chloroprene</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Chromium (II) Chloride</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Chromium (VI) Oxide</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Chromium Oxide</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Chromium Potassium Sulfate</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Chromium (II) Sulfate</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Chrysene</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Cobalt</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Crotonaldehyde</td>
<td>Contains known animal carcinogens and poisons</td>
</tr>
<tr>
<td>Crystal Violet Solution</td>
<td>May form explosive peroxides as it ages</td>
</tr>
<tr>
<td>Cyclohexanol</td>
<td>May form explosive peroxides, toxic by inhalation</td>
</tr>
<tr>
<td>Cyclohexene</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Diazomethane</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Dichloroacetylene</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>p-Dichlorobenzene</td>
<td>Suspected human carcinogen, animal mutagen</td>
</tr>
<tr>
<td>1,2-Dichloroethane</td>
<td>Suspected carcinogen, absorbs through skins</td>
</tr>
<tr>
<td>Dichloropropene</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Dielodrin</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Dicyglycidyl ether (DGE)</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Dimethyl carbamoyl chloride</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>1,1-Dimethylydrazine</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Dimethyl Sulfate</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Dinitrotoluene</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Epichlorohydrin</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Ethyl Ether</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Ethyl bromide</td>
<td>Poison, highly volatile, tends to form explosive peroxides, may cause delayed health effects</td>
</tr>
<tr>
<td>Ethylene Dichloride</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Ethylene Glycol</td>
<td>Animal carcinogen, fire risk, toxic by skin absorption, inhalation, ingestion</td>
</tr>
<tr>
<td>Ethylene Glycol Tetra-acetic Acid</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>FAA Solution</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>Hematoxylin</td>
<td>Contains formaldehyde and 90% alcohol, poison</td>
</tr>
<tr>
<td>Heptachlor</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td></td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
</tbody>
</table>
CLARK COUNTY SCHOOL DISTRICT
RESTRICTED CHEMICAL LISTING

CHEMICAL NAME

Hexachlorobutadiene
Hexachloroethane
Hexamethyl phosphoramidie
Hydrogen Peroxide (30%)
Hydrazine
Iodine
Lead Acetate
Lead and lead compounds

Lindane
Lithium
Lithium Nitrate
Manganous Nitrate
Mercuric compounds

Mercurious compounds

Mercury

Methyl bromide
Methyl chloride
Methyl hydrazine
Methyl iodide
Methylene Chloride
4,4'-Methylene bis(2-chloroaniline)
4,4'-Methylene dianiline
Millon's Reagent
Nessler's Reagent Solution
Nickel chloride
Nickel compounds

Nickel nitrate

REASON FOR RESTRICTION

Suspected carcinogen, absorbs through skin
Suspected carcinogen
Suspected carcinogen, absorbs through skin
Fire and explosion risk, severely corrosive
Suspected carcinogen, absorbs through skin
May react violently, vapors highly toxic
Suspected animal carcinogen
Poison, cumulative neurotoxin, teratogen (Lead acetate is also known animal carcinogen)
Suspected carcinogen, absorbs through skin
Highly water reactive
Animal teratogen
Explosion hazard in dry form
Mercuric compounds are neurotoxins and nephrotoxins and may be absorbed through the skin; Mercuric Chloride, Iodide, and Nitrate are highly toxic by ingestion, inhalation, and skin absorption—may be fatal.
Mercurious compounds are neurotoxins and nephrotoxins and may be absorbed through the skin
Neurotoxin and nephrotoxin, highly toxic by skin absorption and by inhalation of vapors
Suspected carcinogen, absorbs through skin
Suspected carcinogen, absorbs through skin
Suspected carcinogen, absorbs through skin
Suspected carcinogen, absorbs through skin
Possible carcinogen, may be absorbed through skin
Suspected carcinogen, absorbs through skin
Suspected carcinogen, absorbs through skin
Contains 11% mercury
Poison, neurotoxin, and nephrotoxin
Suspected animal carcinogen
Fumes may cause increased risk of lung cancer, many nickel compounds are animal mutagens and carcinogens (also Nickel(ous) compounds)

Suspected animal carcinogen
<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>REASON FOR RESTRICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ninhydrin</td>
<td>Irritant poison, biologically active</td>
</tr>
<tr>
<td>2-Nitropropane</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Oxalic Acid</td>
<td>Neurotoxin and nephrotoxin, poison</td>
</tr>
<tr>
<td>Paraformaldehyde</td>
<td>Mutagen, possible animal carcinogen</td>
</tr>
<tr>
<td>Perchloroethylene</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Phenol</td>
<td>Poison readily absorbed through skin, neurotoxin</td>
</tr>
<tr>
<td>o-Phenylenediamine</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Phenylhydrazine</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Phenylhydrazine Hydrochloride</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Polyvinyl alcohol</td>
<td>Suspected animal carcinogen</td>
</tr>
<tr>
<td>Potassium metal</td>
<td>Extremely reactive, may form explosive peroxides</td>
</tr>
<tr>
<td>Potassium Bromate</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>Potassium Chromate</td>
<td>Possible human carcinogen</td>
</tr>
<tr>
<td>Potassium Dichromate</td>
<td>Possible human carcinogen</td>
</tr>
<tr>
<td>Potassium Ferricyanide</td>
<td>Decomposes to ferrocyanide upon ingestion</td>
</tr>
<tr>
<td>Potassium Nitrite</td>
<td>Animal mutagen and teratogen</td>
</tr>
<tr>
<td>Potassium Permanganate</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>Propane sultone</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Propylene dichloride</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Propylene imine</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Propylene oxide</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Resorcinol</td>
<td>Neurotoxin</td>
</tr>
<tr>
<td>Saponin</td>
<td>Destroys red blood cells, toxic by ingestion</td>
</tr>
<tr>
<td>Silver Acetate</td>
<td>Severely toxic by inhalation and ingestion</td>
</tr>
<tr>
<td>Sodium Azide</td>
<td>Explosive when heated</td>
</tr>
<tr>
<td>Sodium Bisulfite</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>Sodium Borate</td>
<td>Animal mutagen, poisoning effects kidneys</td>
</tr>
<tr>
<td>Sodium Chlorate</td>
<td>Clothing contaminated with chlorates are extremely flammable</td>
</tr>
<tr>
<td>Sodium Chromate</td>
<td>Overexposure may create cancer risk</td>
</tr>
<tr>
<td>Sodium Dichromate</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Sodium Fluoride</td>
<td>Animal Mutagen</td>
</tr>
</tbody>
</table>
## CHEMICAL NAME

- Sodium Nitrite
- Sodium Oxalate
- Sodium Peroxide
- Sodium Salicylate
- Strontium chromate
- Sudan IV
- Tannic Acid
- Testosterone
- Tetrahydrofuran
- Thermit
- Thioacetamide
- Thiourea
- Thymol
- Toluene
- o-Tolidine
- o-Toluidine Blue
- p-Toluidine
- Toluene-2,4-diisocyanate
- Trichloroacetic Acid
- 1,1,1-Trichloroethane
- 1,1,2-Trichloroethane
- Trichloroethylene
- Triethanolamine
- Urethane (Ethyl Carbamate)
- Vinyl bromide
- Vinyl cyclohexene dioxide
- Wood's Metal
- Wright's Stain Solution
- Xylene
- Zinc Acetate

## REASON FOR RESTRICTION

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>REASON FOR RESTRICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Nitrite</td>
<td>Strong oxidizer. Has caused mutagenic, tumorogenic, and reproductive effects in animals</td>
</tr>
<tr>
<td>Sodium Oxalate</td>
<td>Poison; fatal dose &lt; 5 grams, nephrotoxin and neurotoxin</td>
</tr>
<tr>
<td>Sodium Peroxide</td>
<td>Serious explosion/fire risk</td>
</tr>
<tr>
<td>Sodium Salicylate</td>
<td>Animal mutagen and reproductive effects</td>
</tr>
<tr>
<td>Strontium chromate</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Sudan IV</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Tannic Acid</td>
<td>Nephrotoxin and hepatotoxin; reproductive and tumorogenic effects in lab animals</td>
</tr>
<tr>
<td>Testosterone</td>
<td>Suspect human carcinogen</td>
</tr>
<tr>
<td>Tetrahydrofuran</td>
<td>Explosive if improperly stored</td>
</tr>
<tr>
<td>Thermit</td>
<td>Explosive</td>
</tr>
<tr>
<td>Thioacetamide</td>
<td>Positive animal carcinogen, suspected human carcinogen</td>
</tr>
<tr>
<td>Thiourea</td>
<td>Suspected human carcinogen</td>
</tr>
<tr>
<td>Thymol</td>
<td>Tumorigenic, reproductive, and mutagenic effects in animals</td>
</tr>
<tr>
<td>Toluene</td>
<td>Nephrotoxin and hepatotoxin, mutagenic effects in animals</td>
</tr>
<tr>
<td>o-Tolidine</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>o-Toluidine Blue</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>p-Toluidine</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Toluene-2,4-diisocyanate</td>
<td>Suspected carcinogen, sensitizer (allergen)</td>
</tr>
<tr>
<td>Trichloroacetic Acid</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>1,1,1-Trichloroethane</td>
<td>Reproductive and mutagenic effects in animals</td>
</tr>
<tr>
<td>1,1,2-Trichloroethane</td>
<td>Suspected carcinogen, absorbs through skin</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>Positive animal carcinogen</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Urethane (Ethyl Carbamate)</td>
<td>Alleged carcinogen</td>
</tr>
<tr>
<td>Vinyl bromide</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Vinyl cyclohexene dioxide</td>
<td>Suspected carcinogen</td>
</tr>
<tr>
<td>Wood's Metal</td>
<td>Known animal carcinogen, suspected human carcinogen, contains lead and cadmium</td>
</tr>
<tr>
<td>Wright's Stain Solution</td>
<td>Nuerotoxin</td>
</tr>
<tr>
<td>Xylene</td>
<td>Reproductive and mutagenic animal effects</td>
</tr>
<tr>
<td>Zinc Acetate</td>
<td>Reproductive and mutagenic animal effects</td>
</tr>
<tr>
<td>CHEMICAL NAME</td>
<td>REASON FOR RESTRICTION</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Zinc Chloride</td>
<td>Reproductive and tumorigenic effects in animals</td>
</tr>
<tr>
<td>Zinc Oxide</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>Zinc Sulfate</td>
<td>Animal mutagen</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>COMPLETED</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>READ ENTIRE MANUAL</td>
<td></td>
</tr>
<tr>
<td>MAKE TASK ASSIGNMENTS</td>
<td></td>
</tr>
<tr>
<td>ARRANGE FOR TRAINING</td>
<td></td>
</tr>
<tr>
<td>UPDATE INVENTORY</td>
<td></td>
</tr>
<tr>
<td>CHECK MSDSs, ORDER IF NEEDED</td>
<td></td>
</tr>
<tr>
<td>CHECK LABELING</td>
<td></td>
</tr>
<tr>
<td>EMERGENCY RESPONSE AWARENESS</td>
<td></td>
</tr>
<tr>
<td>UPDATE HCP RECORDS</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX N
CHEMICAL INFORMATION SHEET
STATE OF NEVADA

Nevada State Fire Marshal
Hazardous Materials Permit

Name: CLARK COUNTY SCHOOL DISTRICT
   BASIC HIGH SCHOOL

Address: 4260 EUCALYPTUS ANNEX
         LAS VEGAS, NV 89121
         ATTN: TERRE MAIZE

Location: 400 PALO VERDE
          HENDERSON

The above named firm is hereby authorized to maintain
the Special Hazard as provided under the Nevada State
Fire Marshal's Regulations and Nevada Revised Statutes,
Chapter 477. This permit remains the property of the
Nevada State Fire Marshal and must be surrendered to
him upon his demand.

ISSUED: 08/26/91
EXPIRES: 12/31/91
PERMIT NUMBER: XS-030932
NON-TRANSFERABLE

EXEMPT
A HAZARDOUS MATERIAL ISN’T ALWAYS A HAZARDOUS WASTE...
BUT A HAZARDOUS WASTE IS ALWAYS A HAZARDOUS MATERIAL!

WANT TO KNOW MORE?

CALL CLARK COUNTY SCHOOL DISTRICT HAZARDOUS MATERIALS SECTION
799-0990