



City of Garden Grove
 11301 Acacia Parkway
 Garden Grove, CA 92842
 (714) 741-5636

CUPA

BUSINESS ACTIVITIES

FACILITY INFORMATION

I. FACILITY INFORMATION

FACILITY ID#	3 0 0 3 5	1. EPA ID # (Hazardous Waste Only)	2.
BUSINESS NAME (Same as FACILITY NAME or DBA-Doing Business As)			3.

Battery Systems Inc

II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list,
 please submit the Business Owner/Operator Identification page.

Does your facility...	If Yes, please complete these pages of the UPCF...	
A. HAZARDOUS MATERIALS Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO 4.	<input checked="" type="checkbox"/> HAZARDOUS MATERIALS INVENTORY - CHEMICAL DESCRIPTION (Form 3)
B. UNDERGROUND STORAGE TANKS (USTs) 1. Own or operate underground storage tanks? 2. Intent to upgrade existing or install new USTs? 3. Need to report closing a UST?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 5. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 6. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 7.	<input checked="" type="checkbox"/> UST FACILITY (Formerly SWRCB Form A) <input checked="" type="checkbox"/> UST TANK (one page per tank)(Formerly Form B) <input checked="" type="checkbox"/> UST FACILITY <input checked="" type="checkbox"/> UST TANK (one per tank) <input checked="" type="checkbox"/> UST INSTALLATION - CERTIFICATE OF COMPLIANCE (one page per tank)(Formerly Form C) <input checked="" type="checkbox"/> UST TANK (closure portion-one page per tank)
C. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs) 1. Own or operate ASTs above these thresholds: - any tank capacity is greater than 660 gallons, or - the total aggregate capacity for the entire facility (ASTs, drums and portable containers) greater than 1,320 gallons?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 8.	<input checked="" type="checkbox"/> NO FORM REQUIRED TO CUPAS
D. HAZARDOUS WASTE 1. Generate hazardous waste? 2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC §25143.2)? 3. Treat hazardous waste on site? 4. Treatment subject to financial assurance requirements (for Permit by Rule and Condition Authorization)? 5. Consolidate hazardous waste generated at a remove site? 6. Need to report the closure/removal of a tank that was classified waste and cleaned onsite?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 9. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 10. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 11. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 12. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 13. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 14.	<input checked="" type="checkbox"/> EPA ID #-provide at the top of this page <input checked="" type="checkbox"/> RECYCLABLE MATERIALS REPORT (one per recycler) <input checked="" type="checkbox"/> ONSITE HAZARDOUS WASTE TREATMENT - FACILITY (Formerly DTSC Forms 1772) <input checked="" type="checkbox"/> ONSITE HAZARDOUS WASTE TREATMENT - UNIT (one page per unit) (Formerly DTSC Forms 1772A,B,C,D and L) <input checked="" type="checkbox"/> CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232) <input checked="" type="checkbox"/> REMOVE WASTE/CONSOLIDATION SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196) <input checked="" type="checkbox"/> HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (Formerly DTSC Form 1249)
E. LOCAL REQUIREMENTS Cal-ARP: California Accidental Release Prevention Program <i>H&SC Chapter 6.95, Article 2, §25531 et seq</i> - Stationary Source with more than a Threshold Quantity of a Regulated Substance in a Process	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO 15.	<input checked="" type="checkbox"/> REGULATED SUBSTANCE REPORTING FORM (Orange County CUPA)

**GARDEN GROVE FIRE DEPARTMENT
HAZARDOUS MATERIALS DISCLOSURE PROGRAM
BUSINESS EMERGENCY PLAN**

EMERGENCY NOTIFICATIONS:

A handler of hazardous materials is required to immediately report any release or threatened release of hazardous materials to the Garden Grove Fire Department. Failure to do so may result in criminal and/or civil prosecution.

REQUIRED NOTIFICATIONS:

In the event of a release or threatened release of hazardous materials, it is State law to notify each of the following agencies.

AGENCY	PHONE NUMBERS
Garden Grove Fire Department, Police, Paramedics	911
Office of Emergency Services (OES)	(800) 852-7550 or (916) 427-4341
National Response Center	(800) 424-8802
Individual responsible for calling these agencies: <u>Rick DeJong or Chad Bomgaars</u>	

Provide the following information when you call:

- Name of the person and business
- Business street address
- Location of the incident
- Type of incident (spill, gas release, etc.)
- The name(s) of the chemical substance(s) involved
- The amount of the chemical substance(s) involved
- The extent of injuries, if any
- Possible hazards to human health and/or the environment
- Emergency call-back phone number (310) 877-2013

If a chemical spill or release at your facility could create a toxic cloud or a liquid stream that could drift beyond your facility, then, identify nearby facilities that could be in imminent danger.

To the North
 Facility MHT Luxury Alloys Phone (714) 228-7460
 Facility _____ Phone () _____

To the South
 Facility CAD Zodiac Phone (714) 901-2672
 Facility _____ Phone () _____

To the East
 Facility Goodwin Co Phone (714) 894-0531
 Facility _____ Phone () _____

To the West
 Facility Carpet Concepts Phone (714) 892-3384
 Facility _____ Phone () _____

**GARDEN GROVE FIRE DEPARTMENT
HAZARDOUS MATERIALS DISCLOSURE PROGRAM
BUSINESS EMERGENCY PLAN**

OPTIONAL NOTIFICATIONS:

1. Hazardous Waste Contractor
Name: ChemTree (800) 424-9300
2. Insurance Company
Name: Zuric American Co (877) 405-9045
3. Poison Control Center - 24-Hour 1 (800) 876-4766

EVACUATION PLANS AND PROCEDURES:

Evacuation Alarms – describe the type of alarm signals that will be used to start an evacuation at this facility (vocal, paging system, manual alarm, etc.):

The Alarms at The Facility: Paging system, vocal and manual alarms.

Evacuation Drills

Evacuation drills and records proving you have held such drills are required by California law. The drill record does NOT have to be provided to the Fire Department with this business plan, but shall be maintained for a period of three years and shall be available for review by Fire Department personnel. The record shall include the facilitator's name, title, facility location, date of drill, and the signature of the facilitator. For your convenience, a form for recording list information is included with this packet. Make additional copies as needed.

The following four forms:

- A) Evacuation Drill Record
- B) Emergency Coordinator Task Completion Sheet
- C) Emergency Chemical Disclosure Form
- D) Training Record

These forms are designed to assist you in organizing, planning and maintaining permanent records. They are to be retained at the business, and may be requested by emergency responders upon their arrival or during your annual fire inspection.

**GARDEN GROVE FIRE DEPARTMENT
BUSINESS EMERGENCY PLAN
EVACUATION PLANNING**

Describe the evacuation routes, emergency exits, and staging areas for employees in each work area at this facility. (A "staging area" is a specific location where your personnel meet after an evacuation, where you make sure everyone evacuated safely.)

1. Working area: North East Warehouse Area
Evacuation route: Through The Northeast Rollup Door
Emergency exits: _____
Staging area: North Parking lot

2. Working area: North West Warehouse Area
Evacuation route: Through The Northwest Rollup Door
Emergency exits: _____
Staging area: North Parking lot

3. Working area: South West Warehouse Area
Evacuation route: Through The Southwest Rollup door
Emergency exits: _____
Staging area: North Parking lot

4. Working area: South east Warehouse Area
Evacuation route: Through The Southeast Rollup Door
Emergency exits: _____
Staging area: North Parking lot

5. Working area: MAIN OFFICES
Evacuation route: Through The West MAIN Doors
Emergency exits: _____
Staging area: North Parking lot

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

**GARDEN GROVE FIRE DEPARTMENT
BUSINESS EMERGENCY PLAN
EVACUATION PLANNING**

Describe the evacuation routes, emergency exits, and staging areas for employees in each work area at this facility. (A "staging area" is a specific location where your personnel meet after an evacuation, where you make sure everyone evacuated safely.)

1. Working area: Lunch Room + Locker Room
Evacuation route: South west Roll up Door
Emergency exits: South west Emergency Exit
Staging area: North Parking lot

2. Working area: _____
Evacuation route: _____
Emergency exits: _____
Staging area: _____

3. Working area: _____
Evacuation route: _____
Emergency exits: _____
Staging area: _____

4. Working area: _____
Evacuation route: _____
Emergency exits: _____
Staging area: _____

5. Working area: _____
Evacuation route: _____
Emergency exits: _____
Staging area: _____

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

**GARDEN GROVE FIRE DEPARTMENT
BUSINESS EMERGENCY PLAN**

EMPLOYEE RESPONSIBILITIES:

Every business is required to develop an emergency plan. Part of this plan shall include the pre-assignment of important emergency duties to specific employees, and training of employees to carry out these emergency duties. Provide this information below for those employees who will carry out the emergency duties:

JOB TITLE: Manager

EMERGENCY FUNCTION(S): _____

- a. Notify The local Emergency Personnel.
- b. Identify The Nature of The Incident
- c. Report TO The Incoming Fire Units
- d. _____

JOB TITLE: ASST Manager

EMERGENCY FUNCTION(S): _____

- a. Sound The Alarm TO Evacuate The buildings
- b. TAke Role cAll of All Employees at The staging Area
- c. _____
- d. _____

JOB TITLE: _____

EMERGENCY FUNCTION(S): _____

- a. _____
- b. _____
- c. _____
- d. _____

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

**GARDEN GROVE FIRE DEPARTMENT
BUSINESS EMERGENCY PLAN**

TRAINING:

Every business handling hazardous materials above the minimum limits shall provide training for their employees in the following area:

- A. Method for safe handling of hazardous materials.
- B. Procedures for notification and coordination with emergency agencies, in the event of a spill or threatened spill.
- C. Use of emergency response equipment and supplies under the control of the handler.
- D. Emergency mitigation procedures in response to a release or threatened release hazardous material.
- E. Tasks assigned to employees in the event of a hazardous materials emergency.
- F. Evacuation procedures.

Describe the type of training programs you either are currently using or will use during the next year to provide the required employee training.

See Attachments

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

New Employee Orientation Written Review

1. Equipment must be checked for safety before being used.
 - a. True
 - b. False
2. The safety rules are to be observed by all employees while on company property.
 - a. True
 - b. False
3. Employees must be trained on the special equipment they are expected to operate.
 - a. True
 - b. False
4. Fire extinguishers must be placed back in their usual locations after being used, even if they have been discharged.
 - a. True
 - b. False
5. Chemicals are exempt from the requirement of being labeled to identify hazards.
 - a. True
 - b. False
6. All exits must be unlocked during operating hours.
 - a. True
 - b. False
7. Using Personal Protection Equipment is optional.
 - a. True
 - b. False
8. Personal Protection Equipment must be provided by the employer.
 - a. True
 - b. False
9. Regular eye or sunglasses without side shields are satisfactory for eye protection.
 - a. True
 - b. False
10. The Evacuation Emergency Procedure applies to:
 - a. All employees
 - b. All vendors, contractors, and visitors
 - c. Management
 - d. All of the above
11. What means should be used to notify all employees of an order to evacuate?
 - a. A public address system
 - b. A pre-determined code on an audible bell system
 - c. Dispatch others to spread the evacuation order
 - d. Any or all of the above

12. What is an Evacuation Staging Area?
 - a. A pre-assigned assembly area out and away from the building.
 - b. A place where roll can be taken to determine everyone is safe.
 - c. An area where employees can receive first aid and instructions.
 - d. All of the above.

13. What is a reason for evacuation?
 - a. Earthquake or flood
 - b. Hazardous chemical spill
 - c. Fire or bomb threat
 - d. All of the above

14. Who is ultimately responsible for your safety during an emergency that requires building evacuation?
 - a. You are responsible for your own safety and for following procedures.
 - b. Your supervisor
 - c. The safety officer
 - d. NIOSH

15. When a person on Battery Systems property sees a fire that cannot be immediately extinguished, they should do which of the following?
 - a. Evacuate the building
 - b. Call the area supervisor
 - c. Call 911 and report the fire
 - d. Call home

16. When should areas involved in a fire be immediately evacuated?
 - a. When there is danger of the fire spreading.
 - b. When hazardous materials are involved.
 - c. When directed to evacuate by management.
 - d. All of the above.

17. All portable fire extinguishers must be inspected:
 - a. Weekly
 - b. Daily
 - c. Monthly
 - d. Annually

18. The definition of a Person Down is:
 - a. An employee in an underground tank.
 - b. An employee in a confined space.
 - c. A person physically disabled from injury or illness.
 - d. A person who is showing signs of acute depression.

19. If an employee becomes aware of a Person Down and is unable to report to the Division Manager immediately, what should he or she do first?
 - a. Notify the Safety Manager.
 - b. Wait for the Division Manager.
 - c. Call 911.
 - d. Start CPR immediately.

20. If a Person Down emergency occurs the victim should be:
- Made as comfortable as possible without being moved.
 - Moved to the street for the ambulance.
 - Given an accident report to complete.
 - Taken to the Division Manager.
21. The best back injury prevention procedures are based on knowledge of anatomy and how movement affects the back.
- True
 - False
22. A fitness or physical exercise program really does not have any effect on keeping the spine in good condition.
- True
 - False
23. Damaging the spine over and over many times is called:
- a condition of employment and is part of the job
 - cumulative trauma disorder
 - an acute injury
 - a non-preventable injury
24. Injuries caused by repetitive action cannot generally be prevented.
- True
 - False
25. If you develop a Cumulative Trauma Disorders, surgery is usually required to correct the problem.
- True
 - False
26. Which of the following is not a good exercise to help prevent or correct CTD:
- Hand ball
 - Wrist rotation
 - Hand Stretching
 - Wrist Stretching

27. Who has main responsibility for your safety while you are in the plant?

28. What does MSDS stand for and where are they kept?

29. If you read an MSDS and see it calls for you to use safety gear you do not have, what should you do?

30. Why are chemical containers labeled?

31. A good Housekeeping program is the first step to an effective safety program.

- a. True
- b. False

32. A safety inspection is required by all employees at some time during each shift, each week, or each month.

- a. True
- b. False

33. Unsafe acts and unsafe conditions can result in injuries. As an example, if a file drawer is left open and a person trips over the drawer and is injured, which of the following is the best description?

- a. An unsafe act was the primary cause of the injury.
- b. An unsafe condition was the primary cause of the injury.
- c. An unsafe act caused the unsafe condition.

34. There are many unsafe conditions found in office environments. Which of the following are caused by unsafe acts?

- a. Open filing cabinet drawers
- b. Phone or electrical extension cords across walkways
- c. Heavy materials stacked on top of cabinets
- d. Over-loaded electrical outlets
- e. All of the above

35. Thousands of people are injured each year while using office chairs. Which of the following is the least important when using a chair?

- a. The chair is sturdy and well make.
- b. The user does not lean back so far as to cause a fall.
- c. The casters operate smoothly.
- d. It is never used as ladder.
- e. Its color.

Employees Signature

Date

Battery Systems

What to do in case of an Accident

If life threatening

1. Call 911.

If non-life threatening

2. Call Local Police Department (If there are no injuries, police may not go to the scene of the accident). If Police do arrive, please make sure you get the policeman's identification card as well as the case number if available.
3. Notify manager immediately. If your manager is not available then contact Diane Collup at [REDACTED]. If you still can not reach someone contact Bill McAlexander at [REDACTED].
4. Vehicle Accident Report must be completely filled out (Include the name(s)/ driver's license number of the any passengers in the other vehicle, include any auto insurance information from driver of the other vehicle). Take pictures of both the inside/ outside of both vehicles as well as pictures of anyone else involved in the accident and the surrounding area.

If injured, employee must fill out an Employee Accident/ Injury Report and turn it into the manager immediately.

1. It is the employee's responsibility to turn into their manager copies of the 'Work Status Reports' from the doctor's office relating to their ability to return to work and if there are any limitations and notices of pending appointments. These documents are to be forwarded to Diane Collup so that proper coordination with Workers Comp can be done.
2. Every effort will be made to provide modified/light duty as directed by the treating physician. If employee is unable to return to work they will be required to keep in contact with their manager every week. Employee is still required to turn in 'Work Status Reports' to their manager. If employee is release to modified/light duty or full duty employee is expected to report to work on the next business day. If employee does not communicate his/her work status every week to his/her manager or return to work when release to modified/light or full duty Battery Systems will assume employee has abandoned their job and their employment will be terminated.

I understand that it is my responsibility to report all accidents and injuries to my manager immediately even if I don't think I require medical attention or if I think the accident was minor. I also understand that it is my responsibility to follow all the reporting procedures as stated in this document. I understand that failure to report an injury or accident is grounds for disciplinary action including termination.

Employee Signature

Date

BATTERY SYSTEMS

SAFE ACID HANDLING PROCEDURES

I. SCOPE:

This procedure applies to all employees and will be followed whenever battery acid or electrolyte is handled, including adding acid and checking electrolyte specific gravity.

II. HAZARDS:

1. Lead acid storage batteries contain concentrated sulfuric acid, which is corrosive to the skin and eyes. Use all safety precautions in this procedure.
2. The tube at the end of the hydrometer will have acid on it from checking electrolyte level. The flexibility of this tube can cause it to fling drops of electrolyte acid into eyes, on clothing, and onto vehicles and environmental surfaces. Use all safety guidelines in this procedure to ensure control of acid.
3. The charging process normally causes the generation of highly explosive hydrogen, which can easily ignite if a spark or flame is present. Use all safety precautions in this procedure.

III. SAFETY PROCEDURES:

1. Employees assigned to work with storage batteries shall be trained in all standard operating and safety procedures. Employees shall also be trained in emergency procedures and in the location of emergency facilities and equipment. (CCR Title 8, section 5185 (a)).
2. Emergency eyewash facilities shall be available within 10 seconds travel distance from any battery acid handling operation. (CCR Title 8, section 5185 (1) (ANSI Standard Z358.1 - 1981)
3. All battery filling must be done in designated areas using all safety precautions in this procedure.
4. No smoking, sparks or flames are permitted within 25' of any battery with its caps removed. (CCR Title 8 section 5185 (g))
5. Vent caps shall be in place when batteries are being moved. (CCR Title 8, section 5185 (p))
6. Electrolyte shall only be placed in suitable containers and shall not be stirred with metal objects. (CCR Title 8, section 5185 (n))

IV. PERSONAL PROTECTIVE EQUIPMENT:

1. Safety glasses shall be worn by persons removing or replacing battery vent caps, checking electrolyte level, adding water to raise the electrolyte level, or checking the specific gravity of the electrolyte.
2. Face Shield, acid resistant gloves, and an acid resistant apron shall be worn when filling a battery with acid or otherwise pouring, transferring, or dispensing acid.

BATTERY SYSTEMS

SAFE ACID HANDLING PROCEDURES

V. CHECKING ELECTROLYTE LEVEL AND ADDING WATER TO BATTERIES:

1. Wear safety glasses as specified in section IV (1) above.
2. If the battery is in a vehicle, turn off the ignition and all electrical accessories. If the battery is loose, ensure that it is stable and not hooked up to a battery charger.
3. Remove vent caps and store in a secure place where the caps will not fall or get acid on automotive finishes or environmental surfaces.
4. Use a hydrometer to check the specific gravity of the electrolyte in each cell. When taking specific gravity readings, the open end of the hydrometer shall be covered with an acid resistant material while moving it from battery to battery to avoid splashing or throwing the electrolyte.
5. Securely replace each cell vent cap and ensure full seating on the battery.
6. Wash off any acid drips and wipe up any water spills or drips.

VI. FILLING BATTERIES WITH ACID ELECTROLYTE:

1. Wear all Personal Protective Equipment as specified in section IV (2) above.
2. Battery filling is to be done only in designated, well-vented areas.
3. Remove vent caps and store in a secure place where the caps will not fall or get acid on environmental surfaces.
4. Fill each cell to the fluid indicator ring. If you are not sure how high to fill the cell, ask your supervisor.
5. Securely replace each cell vent cap and ensure full seating on the battery.
6. Wipe up any acid drips with paper towels, or rags and place on junk pallet.

BATTERY SYSTEMS Emergency Action Plan

ACID SPILL CLEANUP PROCEDURE

V. Procedure

1. All spill cleanup operations must begin with an evaluation and plan which ensure the safety of all personnel. The second consideration is the prevention of additional damage.
2. Appropriate Personal Protective Equipment shall be worn during all spill cleanup operations as specified in section III above.
3. As appropriate, limit access to the spill area by setting up barricades or posting a guard.
4. If spill involves a tipped or overturned battery, which can be safely and easily turned upright carefully reposition the battery.
5. If the battery is damaged, continues to leak, or the caps are missing, place the battery in a plastic bag. Per Title 22, Section 66266.81 (b), (c), and (d) of the California Code of Regulations:
 - (a) A damaged battery shall be managed so as to minimize the release of acid and lead and to protect the handlers and the environment, including at a minimum:
 - (1) A damaged battery shall be stored and transported in a non-reactive, structurally secure, closed container capable of preventing the release of acid and lead.
 - (2) A container holding one or more damaged batteries shall be labeled with the date that the first battery in the container was placed there, i.e., the initial date of accumulation.
 - (3) All container labels shall be written in ink, paint or other weather-resistant material so that the date is legible and conspicuous.
 - (4) A container holding one or more damaged batteries shall be packed for transportation in a manner that prevents the container from tipping, spilling or breaking during the transportation.
 - (c) A damaged battery packaged and labeled as specified in subsection (b) of this section shall be transported as provided in subsections (a) (4) and (a) (5) of this sections and may be transported with intact batteries, subject in all instances to U.S. Department of Transportation regulations.
 - (d) "Damaged battery" means, for purposes of this article, any cracked or otherwise damaged lead-acid storage battery that may leak acid, including but not limited to:
 - (1) A battery damaged on any time before the lead plates are removed, and
 - (2) A battery that is missing one or more caps.
6. Gather and assemble spill cleanup materials and equipment:
 - (a) Soda Ash
 - (b) Plastic bag(s)
 - (c) Shovel or dust pan and brush
7. Carefully pour soda ash on the spilled acid starting at the perimeter and work inward. Use enough to completely cover and absorb the spilled acid.
8. When the soda ash has absorbed the acid, brush the soda ash into the dustpan or shovel and place in a plastic bag or in the plastic bag containing the battery.

BATTERY SYSTEMS Emergency Action Plan

ACID SPILL CLEANUP PROCEDURE

9. Seal the bag and place in the storage area for core batteries to be sent to the smelter.
10. Clean any acid off tools and equipment used by neutralizing acid then wipe down tools and equipment.
11. Remove PPE and wash hands.

BATTERY SYSTEMS

Hazard Communication Program

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

Objective

Battery Systems has developed and implemented a program to identify chemical hazards, and to alert employees of possible hazards they may be exposed to in the work place.

This program is called the Hazardous Materials Identification System (HMIS). The Hazardous Material Identification System will use container labeling and employee training as a means of communicating:

1. Possible hazards associated with chemical products.
2. Personal Protective Equipment (PPE) required for use by the employees.
3. Flammability rating of the product, and
4. Awareness and avoidance of any reactivity ratings.

Applicability

The Hazardous Material Identification System applies to all persons who work with, or who may contact, any chemical or substance that may be deemed hazardous to health. This program covers visitors, contractors and vendors and other persons who may contact a hazardous substance while in the facility.

Policy

All bulk containers and secondary use containers will be verified for proper labeling (or corrected as necessary) by the Division Manager. All individual packages and storage areas as applicable, will be properly labeled. This will be done by the Division Managers.

Employee Information and Training

Current employees will attend annual Hazardous Material Identification System training. New or transferred employees will receive Hazardous Material Identification System training prior to reporting to a job site where new or different hazardous substances may be present.

BATTERY SYSTEMS

Hazard Communication Program

Responsibility and Procedure

The Division Manager will develop and maintain a master book containing all current MSDS and sample labels. The Division Manager will verify correct container labeling when the container is visible.

In the event a container is not properly labeled, the Division Manager will refer to the MSDS book, copy the sample label and affix the label to the container.

If a container is received that is not properly labeled, has no MSDS, or there is no sample label in the master MSDS book, the Division Manager is directed to do the following:

1. Hold the container until a MSDS properly marked with the National Fire Protection Association (NFPA) ratings is received. The Division Manager will then affix the correct label to the container and place the MSDS and a sample label in the Master MSDS Book and forward a copy of the MSDS to the Safety Manager.

When the Division Manager is notified of an unlabeled or improperly labeled container they are to:

1. Verify the container and its contents.
2. Notify the Purchasing Department that a MSDS is needed, and that the NFPA ratings from the vendor or manufacturer are required.
3. Notify the department that has requisitioned the chemical of the circumstances and give an estimate as to when the chemical will be released.
4. Follow through with vendor until the information from the supplier is received; the master MSDS book is updated, and the container properly labeled and released.

The Purchasing Department responsibilities for hazardous materials include, though may not be limited to:

1. Ensuring all purchase orders for chemicals and hazardous include the requirement for a complete and accurate MSDS and label.
2. Informing the supplier that a MSDS is required to be on file for all hazardous materials to be received.
3. Verifying containers have been labeled according to the NFPA guidelines before they will be accepted.

BATTERY SYSTEMS

Hazard Communication Program

When notified by the Division Manager that a container has been received that is not properly labeled, or there is no current MSDS on file, the Purchasing Department is to contact the supplier and request the information be immediately faxed to Battery Systems. Upon receipt of this information from the supplier, the Purchasing Department is to forward the data to the Division Manager for handling.

Each supervisor is to verify that all chemical products or hazardous materials in their areas are properly labeled and state the correct information.

In instances where small containers are used that prevent labeling, the area where the containers are stored or used will be labeled.

Battery Systems Hazardous Materials Identification System Employee Training

All employees will receive Hazardous Material Identification System (HMIS) training. All new or transferred employees will receive HMIS training prior to reporting to a job site where hazardous substances may be present.

The training includes:

1. Complete review of the Hazard Communication Program
2. Training on NFPA labeling standards and the methods used to determine possible hazards
3. How to determine the ratings of:
 - a. health hazards,
 - b. the flammability rating,
 - c. the reactivity ratings, and
 - d. personal protective equipment as required by label warning
4. Labeling requirements for hazardous material containers.
5. Employees will be instructed as to their responsibilities in following the required labeling standards. Employees are required to properly label all temporary containers they use unless the container is emptied the same day the container is filled.
6. Employees will be trained on first aid emergency medical procedures and location and use of emergency equipment, such as eye wash showers, in their work area.

BATTERY SYSTEMS

Hazard Communication Program

7. All employees receiving training on the Hazard Communication Program and Hazardous Material Identification System are required to take the test on the Hazard Communication Program to verify their knowledge of the Hazardous Material Identification System program.

Hazardous Materials Labeling

It is Battery Systems policy to ensure that each container of all hazardous substances entering the workplace is labeled, tagged or marked with the following information:

1. Identify the hazardous substance(s)
2. Appropriate hazard warnings, and
3. Name and address of the manufacturer, distributor, or other responsible party

Labels using the National Fire Protection Association, Standard #704 is the prime method of identifying the hazards associated with hazardous substances. Whenever required, other methods may be used to identify hazardous materials such as signs, placards, process sheets, or operating procedures as long as the alternative method identifies the containers and conveys the required information.

When a hazardous substance from a labeled container is transferred to a temporary container, the temporary container need not be labeled when intended only for the immediate use of the employee who performs the transfer.

Labels or other forms of warning shall be legible, in English and prominently displayed on the container.

Employees who speak other languages may request the information be translated into their language for their training.

Hazardous substance containers that are either too small or of a nature to prevent labeling will have the use and storage areas marked with suitable labeling and signs as to convey the warning hazard information as required.

It is the employee's responsibility to follow all cautions and warnings as directed by the hazard label. All Personal Protective Equipment must be worn and used as directed by the hazard label.

BATTERY SYSTEMS

Hazard Communication Program

It is the supervisor's responsibility to ensure that all secondary containers are labeled, as applicable, according to the Hazard Communication Program and that employees are trained and follow the warning labels as directed. Supervisors are responsible for reviewing the hazard labels and ensuring the hazard ratings are appropriate for the area operations.

Procedures

Procuring hazardous substances by any means, i.e., purchase requisitions from contractors and vendors, customer-supplied materials, samples, etc., must include the following steps. (Note: Determination that a substance is considered to be hazardous under this policy will be made by the Division Manager.)

1. The Purchasing Department will stipulate on all purchase orders that the vendor is required to package and mark all hazardous substances purchased by Battery Systems in accordance with the applicable federal, state, and local regulations. Labeling requirements are based upon the guidelines established by the National Fire Protection Association. A current and legible MSDS shall accompany all deliveries of hazardous materials.
2. The Division Manager will examine all shipments of hazardous substances for proper labeling. All suppliers of original containers must have a label affixed, which provides, as a minimum, the following information.
 - a. Identity of the hazardous substances,
 - b. Hazard warning statement(s),
 - c. Name and address of the chemical manufacturer, importer, or other responsible party, and
 - d. The Division Manager will conditionally accept containers received without proper labeling.

The Division Manager will notify the Purchasing Department to contact the supplier of the hazardous substance and request the appropriate information. This data will be forwarded to the Division Manager to allow proper labeling of the container.
3. When the Division Manager has verified the proper container labeling the hazardous substance will be released to the requisitioning department.
4. Supervisors will verify that all hazard warning labels are marked appropriately for their areas and operations, and that all containers are correctly labeled.

Facility Safety Items

Daily Items

1. Using vehicle inspection check sheet, check each vehicle and forklift.
2. If a vehicle has an issue that would preclude it from being driven safely then it needs to be pulled from service and fixed.
3. Check soda ash containers to make sure that there are sufficient amounts in the various locations throughout the warehouse

Throughout the Day

4. Make sure that nothing is blocking any exits, electrical panels, fire extinguishers or eye wash stations.
5. Make sure that all junk batteries are in a secondary pallet container.
6. Make sure trash and rags are picked up and disposed of properly.
7. If you have a mezzanine make sure that all chains or guardrails are in place. Remove them only as long as necessary for loading.
8. If any electrical cord is frayed discard and replace.
9. All propane tanks need to be secured (chained together) and out of the way so they will not be hit with the forklift.

Monthly Items

1. The manager must fill out the Monthly Facility Inspection Sheet.

Overview of items on the Monthly Facility Inspection Sheet

1. Inspect the facility inside and out, are there any leaks, cracks or other building issues and note on your Monthly Facility Inspection Sheet.
2. Inspect each Eye Wash Station by making sure that the solution flows through all of the holes. Initial and date the tag on the Eye Wash Station to show that it was inspected. If it has been 4 months since you last flushed, refilled and added the new chemicals to your Eye Wash Station then take care of that now.
3. Inspect each Fire Extinguisher to make sure it is charged (if it is discharged call the company that inspects them and have them come out and recharge or replace). Initial and date the tag after you have inspected it. Remember to have your Fire Extinguishers inspected once a year. The inspecting company will replace the tag with the month and year of inspection. If it has been more then one year since the last inspection we can be fined.

4. If you have stairs check the steps to ensure there are no loose boards. Check the handrails to make sure they are secure. If repairs are needed get them done.
5. Inspect the First Aid Kit are you running low on band aids, etc? Depending on the number of employees you have (and how often someone gets hurt) have your First Aid kit inspected and refilled every 1 to 2 months for a larger division every 3 to 4 months for a medium size division and no less then once every six months for the one person shops.
6. Make sure all containers/bottles have lids/caps and are clearly marked as to the contents.

Vehicle Inspections -- Must be done by the Manager

Vehicle Exterior

1. Walk around the vehicle and check to see if there are any new dents, windshield cracks or exterior items that need to be addressed.
2. Are the tags current? Are they going to be expiring soon? Contact Diane Millager if there is an issue with the tags.
3. Are the decals on the truck coming off? Do any of them need to be replaced?
4. Is the How am I Driving sticker readable? The sticker should be on the back drivers side bumper. If missing report on Monthly Inspection Sheets
5. Check the tire treads. Do the tires need to be replaced?
6. Is the fire extinguisher charged (in the green)? Initial and date the tag on the extinguisher.
7. Is there a full 16 oz eye wash bottle (not expired) in each vehicle?
8. Is the first aid kit full? If not fill from main first aid kit in the warehouse or replace with a spare kit and fill the old one later.
9. Are there Chemical Safety Goggles and heavy-duty gloves in the vehicle?
10. Check the spill kit in the vehicle. Is there plenty of soda ash, spare plastic trash bags, and duct tape in the kit?
11. Is there a new disposable camera in the vehicle?
12. In the Vehicle Information packet there should be the following items.
 - A. Current vehicle registration
 - B. Current Evidence of Insurance
 - C. Current Hazardous Material License (State of California only)
 - D. Current Motor Carrier Permit (State of California only)
 - E. Title 49 paperwork
 - F. Vehicle Weight Sheet (this is in a bright neon color). The info on this sheet lets you know how much weight you can carry on that vehicle it also gives a graph of how much various types of batteries weigh.
 - G. Accident Kit.



Branch Name & # _____
 Month of Audit _____

**BRANCH MONTHLY INSPECTION
 FORM AND REPORT**

This form is to be completed by the Branch Manager or Assistant Manager Between the 1st and 5th day of each month. All immediate hazards or discrepancies are to be corrected or removed immediately all other are to be corrected within 14 days of this inspection. This form is to be filed and readily available for OSHA inspection.

This Form is to be filed and kept for 5 Years.

Offices

1. Are all worksites clean and orderly?
2. Are walking surfaces free from trip hazards?
3. Are all Toilets and Washing facilities clean and sanitary?
4. Is the Lunch area and refrigerator clean and sanitary?
5. Are all area adequately illuminated
6. Are common use areas kept clean and orderly?
7. Are storage racks and cabinets in good condition?
8. Are wall mounted items securely attached to the wall?
9. Are no smoking signs posted at the entrance to the building?

Yes	NO	N/A	Comments

Warehouse

1. Are all worksites clean and orderly?
2. Are work surfaces kept dry or appropriate means taken to assure the surfaces are slip resistant?
3. Are all Spilled material or liquids cleaned up and immediately
4. Is combustible scrap, debris, and waste stored safely, and removed from the worksite promptly?
5. Are all toilets and washing facilities clean and sanitary?
6. Is the First Aid station clearly marked?
7. Is the Eyewash / Safety shower clearly marked?
8. Is the Eyewash / Safety shower tagged for inspection and are the inspections current?
9. Is warning signage secure and legible?
10. Are all wall-mounted items securely mounted to the wall?
11. Are storage racks and storage cabinets in good and working condition.
12. Are all storage containers clean and free of debris?
13. Are floors free from debris, liquids, and miscellaneous material?
14. Are work tools not in use returned to their proper place?
15. Can the Intercom or other communication device be heard from all areas of the warehouse and offices?
16. Are shop rags kept in covered metal waste cans?
17. Are food and drink near chemical operations?
18. Are chemicals labeled appropriately?

Yes	No	N/A	Comments

Exits

1. Are all exits marked with an exit sign and illuminated by a reliable light source?
2. Are all exits kept free from obstructions?

Yes	No	N/A	Comments



Branch Name & # _____
 Month of Audit _____

**BRANCH MONTHLY INSPECTION
 FORM AND REPORT**

Personnel

1. Are all employee's up to date on Safety Training?
2. Do all drivers have a current driver license?
3. Are the Employees properly Dressed and are their uniforms clean and neat.
4. Are employees properly groomed per Battery Systems Dress Code?

yes	no	N/A	Comments

Forms

1. Are the employee files neat and organized?
2. Are all safety training File easy to access and in order?
3. Is the OSHA 300 log posted in a common area ?
4. Are the battery charging and Spill procedures forms posted in a common area as well as the warehouse?
5. Are the Federal and State employee notification forms posted in a common area?
6. Are the MSDS books in good condition and in proper order?

YES	NO	N/A	Comments

Date: _____

Signature: _____

Battery Systems

What to do in case of Injury

If life threatening

1. Call 911.

If non-life threatening

2. Notify manager immediately. If your manager is not available then contact Diane Collup at 562-824-0798. If you still can not reach someone contact Bill McAlexander at 562-842-6193

Employee must fill out an Employee Injury Report and turn it into the manager immediately.

1. It is the employee's responsibility to turn into their manager copies of the 'Work Status Reports' from the doctor's office relating to their ability to return to work and if there are any limitations and notices of pending appointments. These documents are to be forwarded to Diane Collup so that proper coordination with Workers Comp can be done.
2. Every effort will be made to provide modified/light duty as directed by the treating physician. If employee is unable to return to work they will be required to keep in contact with their manager every week. Employee is still required to turn in 'Work Status Reports' to their manager. If employee is release to modified/light duty or full duty employee is expected to report to work on the next business day. If employee does not communicate his/her work status every week to his/her manager or return to work when release to modified/light or full duty Battery Systems will assume employee has abandoned their job and their employment will be terminated.

I understand that it is my responsibility to report all injuries to my manager immediately even if I don't think I require medical attention. I also understand that it is my responsibility to follow all the reporting procedures as stated in this document. I understand that failure to report an injury is grounds for disciplinary action including termination.

Employee Signature

Date

GARDEN GROVE FIRE DEPARTMENT BUSINESS EMERGENCY PLAN

PREVENTION:

Part of the emergency pre-planning process is to identify potential hazards BEFORE an emergency, then either eliminate the hazard (if feasible) or prepare to handle the hazard should an emergency occur. To help you in this task, the form below is designed to help you identify potential hazards and to plan for minimizing the hazard. Complete this information for each hazardous materials storage location within your facility.

HAZARDOUS MATERIALS STORAGE LOCATION	PREVENTATIVE MEASURE
1. <u>Warehouse</u>	<u>To Dike up The Spill with Soda Ash If Possible</u>
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

Comments relating to the listed storage areas:

Prevention measures to be taken at this location:

To have all Employee's Trained on how to handle an Acid Spill.

Estimated date of completion: _____

Actual date of completion: _____

MAKE ADDITIONAL COPIES OF THIS FORM AS NEEDED.

**GARDEN GROVE FIRE DEPARTMENT
BUSINESS EMERGENCY PLAN**

A BUSINESS IS REQUIRED BY LAW TO NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS:

1. Change of business address.
2. Change of business ownership.
3. Change of business name.
4. Cessation of business operation (quitting business).
5. Use or handling of a previously undisclosed hazardous material.
6. A 100% increase in the quantity of a previously disclosed hazardous material.

IN ADDITION, IF A BUSINESS HANDLES EXTREMELY (ACUTELY) HAZARDOUS MATERIALS, THE BUSINESS MUST NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS:

1. A modification, change, or addition to your facility which either increases your usage of extremely hazardous materials by 10% or greater, or substantially increases the risk in handling extremely hazardous materials at that address.

Your business is required by State law to retain a copy of this entire Business Plan, chemical inventory, material safety data sheets and site maps, for review by Fire Department personnel. State where your Disclosure and Emergency Business Plan will be kept.

In a file labeled Cupa. In the office of Rick De Jong & Chad Bongers

Show location on site map also using symbol in the legend.

Note: A fee is charged for a replacement copy from the Garden Grove Fire Department.

I certify, under penalty of perjury, that the enclosed information is true and correct to the best of my knowledge.

Signature: _____

Name: _____

Title: _____

Date: _____



HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

ADD DELETE REVISED 1

Page 1 of 1 2

FACILITY ID#	3 0 0 3 5	38	BUSINESS NAME	Battery Systems Inc
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I. FACILITY INFORMATION

CHEMICAL LOCATION	12400 Industry St, Garden Grove Ca 92841			
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CONFIDENTIAL LOCATION EPCRA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5	MAP #	1	6	GRID #	D-L 3-8	7
-----------------------------	---	---	-------	---	---	--------	---------	---

II. CHEMICAL INFORMATION

CHEMICAL NAME	Lead Acid Battery	WASTE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8	TRADE SECRET	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11
---------------	-------------------	-------	---	---	--------------	---	----

COMMON NAME	Automotive Battery	9	An EHS Chemical	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	12
-------------	--------------------	---	-----------------	---	----

*If EHS is "Yes", all amounts must be LBS

CAS #	10	FIRE CODE HAZARD CLASSES (supplied by GGFD)	13
-------	----	---	----

TYPE (Check one item only)	<input type="checkbox"/> a. PURE <input checked="" type="checkbox"/> b. MIXTURE <input type="checkbox"/> c. WASTE	14	RADIOACTIVE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15	CURIES	16
----------------------------	---	----	-------------	---	----	--------	----

PHYSICAL STATE (Check one item only)	<input checked="" type="checkbox"/> a. SOLID <input type="checkbox"/> b. LIQUID <input type="checkbox"/> c. GAS	17	FED HAZARD CATEGORIES	<input type="checkbox"/> a. FIRE <input type="checkbox"/> b. REACTIVE <input type="checkbox"/> c. PRESSURE RELEASE <input checked="" type="checkbox"/> d. ACUTE HEALTH <input checked="" type="checkbox"/> e. CHRONIC HEALTH	18
--------------------------------------	---	----	-----------------------	--	----

AVERAGE DAILY AMOUNT	47293	19	MAXIMUM DAILY AMOUNT	50000	20	ANNUAL WASTE AMOUNT	0	21	STATE WASTE CODE	0	22
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UNITS	<input type="checkbox"/> a. GALLONS <input checked="" type="checkbox"/> c. POUNDS <input type="checkbox"/> b. CUBIC FEET <input type="checkbox"/> d. TONS	23	DAYS ON SITE	365	24	LARGEST CONTAINER	n/a	25
-------	---	----	--------------	-----	----	-------------------	-----	----

*If EHS, amount must be in pounds.

STORAGE CONTAINER (Check all that apply)	<input type="checkbox"/> a. ABOVEGROUND TANK <input type="checkbox"/> b. UNDERGROUND TANK <input type="checkbox"/> c. TANK INSIDE BLDG <input type="checkbox"/> d. STEEL DRUM <input type="checkbox"/> e. PLASTIC DRUM <input type="checkbox"/> f. NONMETALLIC DRUM <input type="checkbox"/> g. METAL CONTAINER <input type="checkbox"/> h. CARBOY <input type="checkbox"/> i. VAT <input type="checkbox"/> l. FIBER DRUM <input type="checkbox"/> j. BAG(S) <input type="checkbox"/> k. BOX(S) <input type="checkbox"/> m. CYLINDER <input type="checkbox"/> n. GLASS CONTAINER <input type="checkbox"/> o. PLASTIC CONTAINER <input type="checkbox"/> p. IN MACH OR EQUIP <input checked="" type="checkbox"/> q. TANK WAGON <input type="checkbox"/> r. RAIL CAR <input type="checkbox"/> s. TOTE BIN <input checked="" type="checkbox"/> t. OTHER <u>Pallet</u>	26
--	--	----

STORAGE PRESSURE	<input checked="" type="checkbox"/> a. AMBIENT <input type="checkbox"/> b. ABOVE AMBIENT <input type="checkbox"/> c. BELOW AMBIENT	27
------------------	--	----

STORAGE TEMPERATURE	<input checked="" type="checkbox"/> a. AMBIENT <input type="checkbox"/> b. ABOVE AMBIENT <input type="checkbox"/> c. BELOW AMBIENT <input type="checkbox"/> d. CRYOGENIC	28
---------------------	--	----

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 60-97 29	Lead / Lead Oxide	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 30	7439-92-1 32
2 1.5-4 29	Amtimony	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 30	7440-36-0 32
3 < 1 29	Arsenic	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 30	7440-38-2 32
4 10-38 29	Sulfuric Acid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 30	7664-93-9 32
5 <.15 29	Calcium	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 30	7440.70-2 32

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

PLACARDING INFORMATION

UNDOT #	UN2794	33
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Refer to shipping papers or MSDS

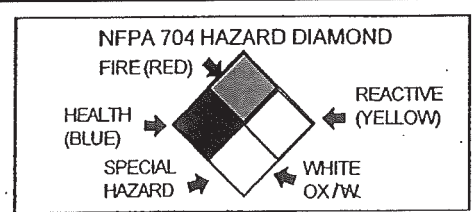
DOT HAZARD CLASS	Class 8	34
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Refer to shipping papers or MSDS

EPCRA	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	35
-------	---	----

X	_____	36
---	-------	----

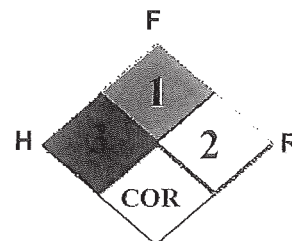
If EPCRA, Please Sign Here



MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED



HAZARD RATING



**TROJAN BATTERY COMPANY
LEAD / ACID BATTERY**

MATERIAL SAFETY DATA SHEET

SECTION 1-- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER'S NAME: TROJAN BATTERY COMPANY	EMERGENCY TELEPHONE NO. CHEMTREC 800-424-9300
ADDRESS: 12380 CLARK ST., SANTA FE SPRINGS, CA 90670	OTHER INFORMATION CALLS: 562-236-3000 800-423-6569
PERSON RESPONSIBLE FOR PREPARATION: Ismael Pedroza, Jr.	Revision Date: November 07, 2007

SECTION 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

C.A.S.	PRINCIPAL HAZARDOUS COMPONENT(S) (chemical & common name(s))	Hazard Category	%	ACGIH TLV	OSHA PEL-TWA
7439.92.1	Lead/Lead Oxide/Lead Sulfate	Acute-Chronic	60 - 97%	0.05 mg/m ³	0.05 mg/m ³
7440.36.0	Antimony	Chronic	1.5 - 4%	0.5 mg/m ³	0.5 mg/m ³
7440.38.2	Arsenic	Acute-Chronic	< 1%	0.01 mg/m ³	0.01mg/m ³
7664-93.9	Sulfuric Acid (Battery Electrolyte)	Reactive-Oxidizer Acute-Chronic	10 - 38%	1.0 mg/m ³	1.0 mg/m ³
7440.70.2	Calcium	Reactive	< 0.15%	Not established	Not established
7440-31-5	Tin	Chronic	< 0.3%	2.0 mg/m ³	Not established

NOTE: PEL's for individual states may differ from OSHA PEL's. Check with local authorities for the applicable state PEL's.
OSHA - Occupational Safety and Health Administration; ACGIH - American Conference of Governmental Industrial Hygienists; NIOSH - National Institute for Occupational Safety and Health.

COMMON NAME: (Used on label)
(Trade Name & Synonyms) Lead/Acid Storage Battery Chemical Family: Toxic and Corrosive Material Mixture
Chemical Name: Lead/Acid Storage Battery Formula: Lead and Acid (electrolyte)

SECTION 3 -- HAZARD IDENTIFICATION

Signs and Symptoms of Exposure	1. Acute Hazards	Do not open battery. Avoid contact with internal components. Internal components include lead and liquid electrolyte. Electrolyte - Electrolyte is corrosive and contact may cause skin irritation and chemical burns. Electrolyte causes severe irritation and burns of eyes, nose and throat. Ingestion can cause severe burns and vomiting. Lead - Direct skin or eye contact may cause local irritation. Inhalation or ingestion of lead dust or fumes may result in headache, nausea, vomiting, abdominal spasms, fatigue, sleep disturbances, weight loss, anemia and leg, arm and joint pain				
2. Subchronic and Chronic Health Effects	Electrolyte - Repeated contact with sulfuric acid battery electrolyte fluid may cause drying of the skin which may result in irritation, dermatitis, and skin burns. Repeated exposure to sulfuric acid mist may cause erosion of teeth, chronic eye irritation and/or chronic inflammation of the nose, throat and lungs. Lead - Prolonged exposure may cause central nervous system damage, gastrointestinal disturbances, anemia, wrist-drop and kidney dysfunction. Pregnant women should be protected from excessive exposure to prevent lead from crossing the placental barrier and causing infant neurological disorders. California Proposition 65 Warning: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm, and during charging, strong inorganic acid mists containing sulfuric acid are evolved, a chemical known to the State of California to cause cancer. Wash hands after handling.					
Medical Conditions Generally Aggravated by Exposure	If battery is broken or material is spilled, then persons with the following medical conditions must take precautions: pulmonary edema, bronchitis, emphysema, dental erosion and tracheobronchitis					
Routes of Entry	Inhalation - YES Ingestion - YES	Eye Contact - YES Skin Contact - YES				
Chemical(s) Listed as Carcinogen or potential Carcinogen	Proposition 65 - YES	National Toxicology Program - YES	I.A.R.C. Monographs - YES	OSHA - NO	EPA CAG - YES NIOSH - YES	

SECTION 4 -- FIRST AID MEASURES

Emergency and First Aid Procedures	Contact with internal components if battery is opened, broken or spilled.
1. Inhalation	Remove to fresh air and provide medical oxygen/CPR if needed. Obtain medical attention.
2. Eyes	Immediately flush with water for at least 15 minutes, hold eyelids open. Obtain medical attention.
3. Skin	Flush contacted area with large amounts of water for at least 15 minutes. Remove contaminated clothing and obtain medical attention if necessary.
4. Ingestion	Do not induce vomiting. If conscious drink large amounts of water/milk. Obtain medical attention. Never give anything by mouth to an unconscious person.

SECTION 5 - FIREFIGHTING MEASURES

Flash Point	Not Applicable	Flammable Limits in Air % by Volume (When charging)	Hydrogen (H ₂)	Lower 4.1%	Upper 74.2%	Extinguisher Media	Class ABC, CO ₂ , Halon	Auto-Ignition Temperature	Polypropylene 675° F
Special Fire Fighting Procedures	Lead-acid batteries do not burn or burn with difficulty. Do not use water on fires where molten metal is present. Extinguish fire with agent suitable for surrounding combustible materials. Cool exterior of battery if exposed to fire to prevent rupture. The acid mist and vapors generated by heat or fire are corrosive. Use NIOSH approved self-contained breathing apparatus (SCBA) and full protective equipment operated in positive-pressure mode.								
Unusual Fire and Explosion Hazards	Hydrogen gas and sulfuric acid vapors are generated upon overcharge and polypropylene case failure. Ventilate charging areas as per ACGIH Industrial Ventilation : A Manual of Recommended Practice and National Fire Code, 1980 Vol. 1, P. 12, B-9, 10. Hydrogen gas may be flammable or explosive when mixed with air, oxygen, chlorine. Avoid open flames/sparks/other sources of ignition near battery. To avoid risk of fire or explosion, keep sparks or other sources of ignition away from batteries and do not allow metallic materials to simultaneously contact negative and positive terminals of cells and batteries. SULFURIC ACID REACTS VIOLENTLY WITH WATER/ORGANICS.								

SECTION 6 -- ACCIDENTAL RELEASE MEASURES

Procedures for Cleanup: Stop release, if possible. Avoid contact with any spilled material. Contain spill, isolate hazard area, and deny entry. Limit site access to emergency responders. Neutralize with sodium bicarbonate, soda ash, lime or other neutralizing agent. Place battery in suitable container for disposal. Dispose of contaminated material in accordance with applicable local, state and federal regulations. Sodium bicarbonate, soda ash, sand, lime or other neutralizing agent should be kept on-site for spill remediation.

Personal Precautions: Acid resistant aprons, boots and protective clothing. ANSI approved safety glasses with side shields/face shield recommended. Ventilate enclosed areas.

Environmental Precautions: Lead and its compounds and sulfuric acid can pose a severe threat to the environment. Contamination of water, soil, and air should be prevented.

SECTION 7 -- HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage	Keep away from flames during and immediately after charging. Combustion or overcharging may create or liberate toxic and hazardous gases and liquids including hydrogen, sulfuric acid mist, sulfur dioxide, sulfur trioxide, stibine, arsine and sulfuric acid. Store batteries in cool, dry, well ventilated area. Do not short circuit battery terminals, or remove vent caps during storage or recharging. Protect battery from physical damage.
Other Precautions	GOOD PERSONAL HYGIENE AND WORK PRACTICES ARE MANDATORY. Refrain from eating, drinking or smoking in work areas. Thoroughly wash hands, face, neck, and arms before eating, drinking or smoking. Launder soiled clothing before reuse. Emptied batteries contain hazardous sulfuric acid residue.

SECTION 8 -- EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory Protection (Specify Type)	Acid/gas NIOSH approved respirator is required when the PEL is exceeded or employee experiences respiratory irritation. When exposure levels are unknown or when firefighting, wear a self-contained breathing apparatus with a full facepiece operated in a positive pressure mode.				
Ventilation	Must be provided when charging in an enclosed area. Change air every 15 min.	Local Exhaust	When PEL is exceeded	Mechanical (General)	Normal mechanical ventilation recommended for stationary applications.
Protective Gloves	Wear rubber or plastic acid resistant gloves with elbow length gauntlet when filling batteries.	Eye Protection	ANSI approved safety glasses with side shields/face shield recommended. Safety goggles.		
Other Protective Clothing or Equipment	Ventilation as described in the <u>Industrial Ventilation Manual</u> produced by the American Conference of Governmental Industrial Hygienists, shall be provided in areas where exposures are above the PEL or TLV specified by OSHA or other local, state and federal regulations. Acid-resistant rubber or plastic apron, boots and protective clothing. Safety shower and eyewash.				

SECTION 9 -- PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	Electrolyte Approx. 235° F	Vapor Pressure	Electrolyte 1 mm Hg @ 145.8° F	Specific Gravity	Electrolyte (H ₂ O = 1) 1.250 - 1.320 pH < 2	Melting Point	Polypropylene < 320° F
Percent Volatile by Volume (%)	Not Applicable	Vapor Density	Hydrogen (Air = 1) : 0.069 Electrolyte (Air = 1) : 3.4	At STP	Evaporation Rate	Not Applicable	
Solubility in Water	Electrolyte: 100% Soluble			Reactivity in Water	Electrolyte - water reactive (1)		
Appearance and Odor	Battery: Polypropylene or hard rubber case, solid. Lead: Gray, metallic, solid Electrolyte: Liquid, colorless, oily fluid; nuisance odor when hot or charging battery.						

SECTION 10 -- STABILITY AND REACTIVITY

Stability	Unstable <input type="checkbox"/> Stable <input checked="" type="checkbox"/>	Conditions to Avoid	High temperatures - cases decompose at <320°F. Avoid overcharging and smoking, or sparks near battery surface and rapid overcharge.
Incompatibility (Materials to Avoid)	Sparks, Open flames, Keep battery case away from strong oxidizers.		
Hazardous Decomposition Products	An explosive hydrogen/oxygen mixture within the battery may occur during charging. Combustion can produce carbon dioxide (CO ₂) and carbon monoxide (CO) Molten metals produce fumes and/or vapor that may be toxic or respiratory irritants.		
Hazardous Polymerization	May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	Do not overcharge	

SECTION 11 -- TOXICOLOGICAL INFORMATION

GENERAL: The primary routes of exposure to lead are ingestion or inhalation of dust and fumes.

ACUTE:

INGESTION/INHALATION: Exposure to lead and its compounds may cause headache, nausea, vomiting, abdominal spasms, fatigue, sleep disturbances, weight loss, anemia, and pain in the legs, arms and joints. Kidney damage, as well as anemia, can occur from acute exposure.

CHRONIC:

INHALATION/INGESTION: Prolonged exposure to lead and its compounds may produce many of the symptoms of short-term exposure and may also cause central nervous system damage, gastrointestinal disturbances, anemia, and wrist drop. Symptoms of central nervous system damage include fatigue, headaches, tremors, hypertension, hallucinations, convulsions and delirium. Kidney dysfunction and possible injury has also been associated with chronic lead poisoning. Chronic over-exposure to lead has been implicated as a causative agent for the impairment of male and female reproductive capacity, but there is, at present, no substantiation of the implication. Pregnant women should be protected from excessive exposure. Lead can cross the placental barrier and unborn children may suffer neurological damage or developmental problems due to excessive lead exposure in pregnant women.

SECTION 12 -- ECOLOGICAL INFORMATION

In most surface water and groundwater, lead forms compounds with anions such as hydroxides, carbonates, sulfates, and phosphates and precipitates out of the water column. Lead may occur as sorbed ions or surface coatings on sediment mineral particles or may be carried in colloidal particles in surface water. Most lead is strongly retained in soil, resulting in little mobility. Lead may be immobilized by ion exchange with hydrous oxides or clays or by chelation with humic or fulvic acids in the soil. Lead (when in the dissolved phase) is bio-accumulated by plants and animals, both aquatic and terrestrial.

SECTION 13 -- DISPOSAL CONSIDERATIONS

Waste Disposal Methods	Lead-acid batteries are completely recyclable. Return whole scrap batteries to distributor, manufacturer or lead smelter for recycling. For information on returning batteries to Trojan Battery Company for recycling call 800-423-6569. For neutralized spills, place residue in acid-resistant containers with sorbent material, sand or earth and dispose of in accordance with local, state and federal regulations for acid and lead compounds. Contact local and/or state environmental officials regarding disposal information.
------------------------	--

SECTION 14 -- TRANSPORT INFORMATION

U.S. DOT PROPER SHIPPING NAME: Batteries, wet, filled with acid
U.S. DOT HAZARD CLASS: 8
U.S. DOT ID NUMBER: UN 2794
U.S. DOT PACKING GROUP: III
U.S. DOT LABEL: Corrosive

IMO PROPER SHIPPING NAME: Batteries, wet, filled with acid
IMO REGULATION PAGE NUMBER: 8120
IMO U.N. CLASS: 8
IMO U.N. NUMBER: UN 2794
IMO PACKING GROUP: III
IMO LABEL: Corrosive
IMO VESSEL STOWAGE: A

IATA PROPER SHIPPING NAME: Batteries, wet, filled with acid
IATA U.N. CLASS: 8
IATA U.N. NUMBER: UN 2794
IATA PACKING GROUP: III
IATA LABEL: Corrosive

SECTION 15 -- REGULATORY INFORMATION

U.S. Hazardous Under Hazard Communication Standard:

Lead - YES
Sulfuric Acid - YES
Antimony - YES
Arsenic - YES

Ingredients Listed on TSCA Inventory:

YES

CERCLA Section 304 Hazardous Substances:

Lead -- YES	RQ: NA*
Sulfuric Acid -- YES	RQ: 1000 pounds
Antimony . YES	RQ: 5000 pounds
Arsenic -- YES	RQ: 1 pound

*Reporting not required when diameter of the pieces of solid metal released is equal to or exceeds 100 micrometers

EPCRA Section 302 Extremely Hazardous Substance

Sulfuric acid . YES

EPCRA Section 313 Toxic Release Inventory:

Lead - CAS NO: 7439-92-1
Sulfuric Acid - CAS NO: 7664-93.9
Antimony - CAS NO: 7440-36-0
Arsenic - CAS NO: 7440-38-2

SECTION 16 -- OTHER INFORMATION

THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, TROJAN BATTERY COMPANY MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. ALTHOUGH REASONABLE PRECAUTIONS HAVE BEEN TAKEN IN THE PREPARATION OF THE DATA CONTAINED HEREIN, IT IS OFFERED SOLELY FOR YOUR INFORMATION, CONSIDERATION AND INVESTIGATION. THIS MATERIAL SAFETY DATA SHEET PROVIDES GUIDELINES FOR THE SAFE HANDLING AND USE OF THIS PRODUCT; IT DOES NOT AND CANNOT ADVISE ON ALL POSSIBLE SITUATIONS, THEREFORE, YOUR SPECIFIC USE OF THIS PRODUCT SHOULD BE EVALUATED TO DETERMINE IF ADDITIONAL PRECAUTIONS ARE REQUIRED.

Form MSDS Rev. 11/07/07



HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

ADD DELETE REVISED 1

Page 1 of 1 2

FACILITY ID#	3 0 0 3 5	38	BUSINESS NAME Battery Systems Inc
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I. FACILITY INFORMATION

CHEMICAL LOCATION	12400 Industry St, Garden Grove Ca 92841
-------------------	--

CONFIDENTIAL LOCATION EPCRA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MAP #	1	GRID #	D-2 2-8
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II. CHEMICAL INFORMATION

CHEMICAL NAME Sulfuric Acid	WASTE <input type="checkbox"/> Yes	TRADE SECRET <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--------------------------------	------------------------------------	--

COMMON NAME Battery Acid / Electrolyte	An EHS Chemical <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
---	---

*If EHS is "Yes", all amounts must be LBS

CAS #	FIRE CODE HAZARD CLASSES (supplied by GGFD)
-------	---

TYPE (Check one item only)	<input type="checkbox"/> a. PURE	<input checked="" type="checkbox"/> b. MIXTURE	<input type="checkbox"/> c. WASTE	RADIOACTIVE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CURIES
----------------------------	----------------------------------	--	-----------------------------------	---	--------

PHYSICAL STATE (Check one item only)	<input type="checkbox"/> a. SOLID	<input checked="" type="checkbox"/> b. LIQUID	<input type="checkbox"/> c. GAS	FED HAZARD CATEGORIES	<input checked="" type="checkbox"/> a. FIRE	<input type="checkbox"/> b. REACTIVE	<input checked="" type="checkbox"/> c. PRESSURE RELEASE
--------------------------------------	-----------------------------------	---	---------------------------------	-----------------------	---	--------------------------------------	---

AVERAGE DAILY AMOUNT	4000	MAXIMUM DAILY AMOUNT	7900	ANNUAL WASTE AMOUNT	0	STATE WASTE CODE	0
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UNITS	<input type="checkbox"/> a. GALLONS	<input type="checkbox"/> b. CUBIC FEET	<input checked="" type="checkbox"/> c. POUNDS	<input type="checkbox"/> d. TONS	DAYS ON SITE	365	LARGEST CONTAINER	5 gallon
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*If EHS, amount must be in pounds.

STORAGE CONTAINER (Check all that apply)	<input type="checkbox"/> a. ABOVEGROUND TANK	<input type="checkbox"/> e. PLASTIC DRUM	<input type="checkbox"/> i. VAT	<input type="checkbox"/> m. CYLINDER	<input type="checkbox"/> q. TANK WAGON
	<input type="checkbox"/> b. UNDERGROUND TANK	<input type="checkbox"/> f. NONMETALLIC DRUM	<input type="checkbox"/> j. FIBER DRUM	<input type="checkbox"/> n. GLASS CONTAINER	<input type="checkbox"/> r. RAIL CAR
	<input type="checkbox"/> c. TANK INSIDE BLDG	<input type="checkbox"/> g. METAL CONTAINER	<input checked="" type="checkbox"/> k. BAG(S)	<input type="checkbox"/> o. PLASTIC CONTAINER	<input type="checkbox"/> s. TOTE BIN
	<input type="checkbox"/> d. STEEL DRUM	<input type="checkbox"/> h. CARBOY	<input checked="" type="checkbox"/> l. BOX(S)	<input type="checkbox"/> p. IN MACH OR EQUIP	<input type="checkbox"/> t. OTHER

STORAGE PRESSURE	<input checked="" type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT
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STORAGE TEMPERATURE	<input checked="" type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT	<input type="checkbox"/> d. CRYOGENIC
---------------------	--	---	---	---------------------------------------

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 31-39	Sulfuric acid	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7664-96-9
2 61-69	water	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7732-18-5
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

PLACARDING INFORMATION

UNDOT # 2796 33

Refer to shipping papers or MSDS

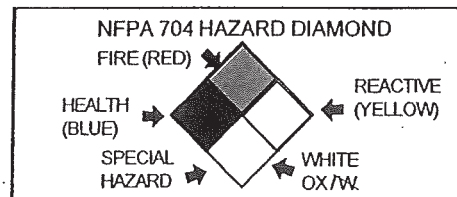
DOT HAZARD CLASS Class 8 34

Refer to shipping papers or MSDS

EPCRA YES NO 35

X _____ 36

If EPCRA, Please Sign Here



MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED

Scholle Corporation

2300 West Point., College Park, Ga 30337 / Tel: (404) 761-0604 / Fax: (404) 559-8892

Emergency Telephone Chemtrec (800) 424-9300

June, 2002

Material Safety Data Sheet

Battery Fluid, Acid (Electrolyte)

This Material Safety Data Information Sheet is principally directed to managerial, safety, hygiene and medical personnel. The description of physical, chemical and toxicological properties and handling advice is based on experimental results and past experience. It is intended as a starting point for the development of health and safety procedures.

DOT LABELING REQUIREMENTS

Shipping Name: Battery fluid, acid
 Class: 8
 UN No.: UN2796

HAZARDOUS INGREDIENTS/IDENTITY:

	OSHA PEL	ACGIH TLV	CAS NUMBER	WEIGHT %
Sulfuric Acid - 66° Baume (Mineral Acid, Oil of Vitriol, H ₂ SO ₄ , sulphuric acid)	1 mg/cubic M	1 mg/cubic M	7664-93-9	31-39
WATER				61-69
40 CFR Part 372.45				

TOXICOLOGY DATA:

Notification: Battery fluid, acid contains between 31 and 39% by weight of H₂SO₄ (CAS No. 7664-93-9) and is subject to the reporting requirements of section 313 of Title III of the superfund amendments and re-authorization act of 1986. It is also subject to the reporting requirements of 40 CFR part 372.

Acute oral LD₅₀: 2,140 mg/kg in rat, skin and eye irritation (rabbit)
 Corrosive inhalation 1 hour LC₅₀ Rat: 347 PPM

PHYSICAL & CHEMICAL CHARACTERISTICS:

Formula: H₂SO₄
 Formula Weight: 98.08
 Physical State: Clear, to yellowish liquid
 Description:
 Boiling Point: 32-38 % = above 235 Degrees F
 Flash Point: Not applicable
 Freezing Point: 32-38% = less than -49 Degrees F
 Odor: Acid sharp unpleasant odor
 pH: less than 1 (1% aqueous solution)
 Specific Gravity: 32-38% = 1.240 to 1.280 (water = 1)
 Vapor Density: 3.4 (Air = 1 at boiling point of sulfuric acid)
 Vapor Pressure: 32-38% = Less than 1 mmHg at 100 degrees F (37.8°C)
 Water Solubility: Soluble in all proportions
 Reportable Quantity: 1,000 lb./454 kg. As H₂SO₄

HMIS RATINGS

Health 3
 Flammability 0
 Reactivity 2
 Personal Protection ... D

HAZARD INDEX

0 = Insignificant
 1 = Slight 2 = Moderate
 3 = High 4 = Extreme

Scholle Corporation

2300 West Point Ave. College Park, Ga, 30337 Tel: (404) 781-0004 / Fax: (404) 669 8892 June 2002

Emergency Telephone
Chemtrec (800) 424-9300

**Battery Fluid,
Acid**

**FIRE &
EXPLOSION DATA:**

Flash Point: N/A
 Auto-Ignition
 Temperature: N/A
 Extinguisher Media: Dry chemical or CO₂ small fires Water fog. large fires.
 Special Fire
 Fighting Procedures: Do not direct water into acid tanks. Cool outside of tank with water. Wear full-face, self-contained respirator, rubberized outer wear, gloves, boots.
 Unusual Fire and
 Explosion Hazards: Sulfuric acid will not burn but can start fires with organic material, nitrates, carbides, chlorates and metal powders. Flammable hydrogen gas can form when acid contacts most metals. Hydrogen may accumulate in containers, avoid ignition sources, spill over into sewers may generate hydrogen gas or toxic sulfides. Addition of water to acid causes heat and possible splattering.

**PHYSICAL HAZARDS:
(REACTIVITY DATA)**

Stability: Stable
 Conditions to Avoid: Contact With metals, organics.
 Incompatibility:
 (Materials to Avoid) Strong corrosive agent will attack most metals. Contact with organics, nitrates, carbides, chlorates, etc. may cause ignition. Alkyl compounds and aldehydes undergo polymerization - possibly violent.

Hazardous
 Decomposition
 Products: Sulfur oxides at high temperature. Reacts with above to form hydrogen cyanide and hydrogen sulfide.

Hazardous
 Polymerization:
 Will Not Occur

Conditions
 to Avoid: All contact with organic substances and most metals.

HEALTH HAZARDS:

Acute: 3rd degree burns. Severe respiratory, skin and eye irritant. Bronchitis Laryngeal and pulmonary edema may result.

Signs and
 Symptoms of
 Exposure: Prickling or burning sensation of skin and mucous membranes. Coughing, sneezing, tightness of chest, difficulty in breathing.

Medical Conditions
 Generally Aggravated
 by Exposure: Any pre-existing respiratory disease, for example emphysema.

Scholle Corporation

/ 2300 West Point Ave., College Park, Ga 30037 / Tel: (404) 781-0004 / Fax: (404) 550-8892

Emergency Telephone
Chemtrec (800) 424-9300

June, 2002

Battery Fluid, Acid

HEALTH HAZARDS (continued):

I.A.R.C. Monographs:

A study of refinery workers suggested a possible link between sulfuric acid exposure and laryngeal cancer. However, due to the small number of workers involved and the mixed exposure to several other materials including diethylsulfate (an I.A.R.C. and NTP carcinogen), there is no cause-and-effect relationship can be inferred from the data available.

These studies have been conducted for various industries, but no studies of battery acid manufacturing facilities have been included. The overall weight of evidence from animal toxicity and human epidemiological studies show no relationship between cancer and sulfuric acid exposure.

National Toxicology Program: NO
OSHA: NO
CA/OSHA: NO
Prop66: NO

Emergency and First Aid Procedures:

Speed in removing acid is essential. Treat most urgent symptoms first; cessation of breathing, eye injury, skin contact, shock. Seek medical assistance even if injury appears slight. Give physician detailed account of incident.

RECOMMENDATIONS TO PHYSICIAN:

While the patient is being transported to a medical facility, apply compresses of iced water. If medical treatment must be delayed, immerse the affected area in iced water. If immersion is not practical, compresses of iced water can be applied. Avoid freezing tissues.

Note to Physician:

Continued washing of the affected area with cold or iced water will be helpful in removing the last traces of sulfuric acid. Creams or ointments should not be applied before or during the washing phase of the treatment.

ROUTES OF ENTRY:

Inhalation: Remove from exposure. CPR, if indicated. Give oxygen.
Eyes: Flush immediately with large amounts of water for at least 15 minutes. Hold eyelids open during flushing.
Skin: Flush immediately with large amounts of water. Remove contaminated clothing and shoes (this can be done while under shower).
Ingestion: Do not induce vomiting. Give large amounts of milk, milk of magnesia or table oil or fresh eggs. Use water when nothing else is available. Rinse mouth often.

Conditions

Aggravated by:

Individuals with preexisting disease of the lungs may have increased susceptibility to the toxicity of excessive exposure.

Scholle Corporation

2300 West Point Ave. College Park, Ga. 30337 Tel: (404) 761-0604 / Fax: (404) 559-8892 June, 2002

Emergency Telephone
Chemtree (800) 424-9300

Battery Fluid, Acid

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES:

Precautions to be Taken in

Handling and Storage: See "Unusual Fire and Explosion Hazards." Do not store near organics. Hydrogen may be generated inside drums and tanks; avoid flames and sparks.

Other Precautions:

Never add water to containers of acid. For spills, beware of acid reaction in sewers that may produce flammable hydrogen gas or toxic sulfides.

Steps to be Taken in Case Material is Released or Spilled:

Wear full acid-protective gear. Remove sources of ignition. Neutralize spill with lime or soda ash. Flush to on-site waste water treatment system. Dike large spills. Do not wash into storm or sanitary sewer system.

Waste Disposal Methods (Consult Federal, State and Local Regulations):

Flush as above. Neutralize with lime or soda ash, (a minimum of 5.2 pounds soda ash per gallon of battery fluid, electrolyte). Consult regulations. EPA hazardous waste D002 - corrosive and D003 - reactive if discarded without prior neutralization.

SPECIAL PROTECTION INFORMATION/CONTROL MEASURES:

Respiratory Protection: When needed use NIOSH or MSHA approved half or full-face mask with acid gas cartridge. For high concentrations, use self-contained breathing unit.
Required

Ventilation:

Yes

Local Exhaust:

Ventilate storage tanks before entry.

Mechanical:

Rubber

Protective Gloves:

Chemical goggles or full-face shield.

Eye Protection:

Other Protective

Clothing or

Equipment:

Rubber safety shoes/boots. Rubber apron or full suit if splashes likely.

Work/Hygienic

Practices:

Prohibit smoking. Provide safety showers/eye washes near work site. Train employees in chemical handling practices.

Maintenance of

Contaminated

Equipment:

Use same precautions as in "Special Precautions" above.

Labeling Priority:

Battery Fluid, Acid, 8, UN2796, Pg. 11



HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

ADD DELETE REVISED 1

Page 1 of 1 2

FACILITY ID#	3	0	0	3	5						38	BUSINESS NAME	3
												Battery Systems Inc	

I. FACILITY INFORMATION

CHEMICAL LOCATION	12400 Industry St, Garden Grove Ca 92841	4
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CONFIDENTIAL LOCATION EPCRA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5	MAP #	1	6	GRID #	E-2	7
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II. CHEMICAL INFORMATION

CHEMICAL NAME	Propane	WASTE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8	TRADE SECRET	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	11
					If EPCRA see instructions		

COMMON NAME	Odorized Commercial Propane	9	An EHS Chemical	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	12
			*If EHS is "Yes", all amounts must be LBS		

CAS #		10	FIRE CODE HAZARD CLASSES (supplied by GGFD)		13
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TYPE (Check one item only)	<input type="checkbox"/> a. PURE <input checked="" type="checkbox"/> b. MIXTURE <input type="checkbox"/> c. WASTE	14	RADIOACTIVE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15	CURIES		16
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PHYSICAL STATE (Check one item only)	<input type="checkbox"/> a. SOLID <input type="checkbox"/> b. LIQUID <input checked="" type="checkbox"/> c. GAS	17	FED HAZARD CATEGORIES	<input checked="" type="checkbox"/> a. FIRE <input type="checkbox"/> b. REACTIVE <input checked="" type="checkbox"/> c. PRESSURE RELEASE <input type="checkbox"/> d. ACUTE HEALTH <input type="checkbox"/> e. CHRONIC HEALTH	18
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AVERAGE DAILY AMOUNT	30	19	MAXIMUM DAILY AMOUNT	65	20	ANNUAL WASTE AMOUNT	0	21	STATE WASTE CODE	0	22
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UNITS	<input checked="" type="checkbox"/> a. GALLONS <input type="checkbox"/> b. CUBIC FEET <input type="checkbox"/> c. POUNDS <input type="checkbox"/> d. TONS	23	DAYS ON SITE	365	24	LARGEST CONTAINER	7 gal	25
	*If EHS, amount must be in pounds.							

STORAGE CONTAINER (Check all that apply)	<input type="checkbox"/> a. ABOVEGROUND TANK <input type="checkbox"/> b. UNDERGROUND TANK <input type="checkbox"/> c. TANK INSIDE BLDG <input type="checkbox"/> d. STEEL DRUM	<input type="checkbox"/> e. PLASTIC DRUM <input type="checkbox"/> f. NONMETALLIC DRUM <input type="checkbox"/> g. METAL CONTAINER <input type="checkbox"/> h. CARBOY	<input type="checkbox"/> i. VAT <input type="checkbox"/> j. FIBER DRUM <input type="checkbox"/> k. BAG(S) <input type="checkbox"/> l. BOX(S)	<input checked="" type="checkbox"/> m. CYLINDER <input type="checkbox"/> n. GLASS CONTAINER <input type="checkbox"/> o. PLASTIC CONTAINER <input type="checkbox"/> p. IN MACH OR EQUIP	<input type="checkbox"/> q. TANK WAGON <input type="checkbox"/> r. RAIL CAR <input type="checkbox"/> s. TOTE BIN <input type="checkbox"/> t. OTHER	26
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STORAGE PRESSURE	<input checked="" type="checkbox"/> a. AMBIENT <input type="checkbox"/> b. ABOVE AMBIENT <input type="checkbox"/> c. BELOW AMBIENT	27
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STORAGE TEMPERATURE	<input checked="" type="checkbox"/> a. AMBIENT <input type="checkbox"/> b. ABOVE AMBIENT <input type="checkbox"/> c. BELOW AMBIENT <input type="checkbox"/> d. CRYOGENIC	28
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%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 87.5-100 ²⁹	Propane	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	74-98-6
2 0-7.0 ²⁹	Ethane	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	74-84-0
3 0-5.0 ²⁹	Propylene	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	115-07-1
4 0-2.5 ²⁹	Butanes	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	106-97-8
5 0-50ppm ²⁹	Ethyl Mercaptan	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	75-08-1

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

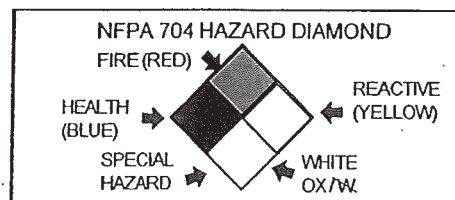
PLACARDING INFORMATION

UNDOT #	UN1075	33
	Refer to shipping papers or MSDS	

DOT HAZARD CLASS	Class 2.1	34
	Refer to shipping papers or MSDS	

EPCRA	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	35
-------	---	----

X		36
	If EPCRA, Please Sign Here	



MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED

MATERIAL SAFETY DATA SHEET FOR ODORIZED PROPANE

1. Chemical Product and Company Identification

Product Name: Odorized Commercial Propane
Chemical Name: Propane
Chemical Family: Paraffinic Hydrocarbon
Formula: C₃H₈
Synonyms: Dimethylmethane, LP-Gas, Liquefied Petroleum Gas (LPG), Propane, Propyl Hydride
Transportation Emergency Number: CHEMTREC 1-800-424-9300

Name & Address:
 AmeriGas Propane, L.P.
 P. O. Box 965
 Valley Forge, PA. 19482
For General Information, Call:
 1-610-337-1000, Safety Dept.

2. Composition / Information on Ingredients

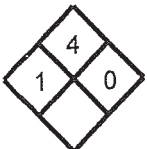
INGREDIENT NAME / CAS NUMBER	PERCENTAGE	OSHA PEL	ACGIH TLV
Propane / 74-98-6	87.5 - 100	1,000 ppm	Simple asphyxiant
Ethane / 74-84-0	0 - 7.0		Simple asphyxiant
Propylene / 115-07-1	0 - 5.0		Simple asphyxiant
Butanes / 106-97-8	0 - 2.5	0.5 ppm	Simple asphyxiant
Ethyl Mercaptan / 75-08-1	0 - 50 ppm		0.5 ppm

WARNING: The intensity of the chemical odorant (e.g., ethyl mercaptan) may "fade" or diminish due to chemical oxidation, adsorption or absorption. Individuals with nasal perception problems may not be able to smell the odorant. Leaking propane from underground gas lines may lose its odor as it passes through certain soils. No odorant is effective 100% of the time. Therefore, circumstances can exist when individuals are in the presence of leaking propane and not be alerted by the smell. Contact AmeriGas for more information about odor, propane gas detectors and other safety considerations associated with the handling, storage and use of propane.

3. Hazards Identification

DANGER! Flammable liquefied gas under pressure. Keep away from heat, sparks, flame, and all other ignition sources. Vapor replaces oxygen available for breathing and may cause suffocation in confined spaces. Use only with adequate ventilation. Reliance upon detection of odor may not provide adequate warning of potentially hazardous concentrations. Vapor is heavier than air; may collect at low levels. Liquid can cause freeze burn similar to frostbite. Do not get liquid in eyes, on skin, or on clothing. Avoid breathing vapor. Keep service valve closed when not in use.

EMERGENCY OVERVIEW

HEALTH HAZARD (Blue)		REACTIVITY (Yellow)
-------------------------	--	------------------------

SPECIAL HAZARDS*

Minimal 0	Moderate 2	Severe 4
Slight 1	Serious 3	*(Ref. NFPA 704)

FIRE HAZARD
(Red)

POTENTIAL HEALTH EFFECTS INFORMATION

ROUTES OF EXPOSURE:

Inhalation: Asphyxiation. Before suffocation could occur, the lower flammability limit of propane in air would be exceeded, possibly causing both an oxygen-deficient and explosive atmosphere. Exposure to concentrations >10% may cause dizziness. Exposure to atmospheres containing 19% or less oxygen will bring about unconsciousness without warning. Lack of sufficient oxygen may cause serious injury or death.

Eye Contact: Contact with liquid can cause freezing of tissue.

Skin Contact: Contact with liquid can cause frostbite.

Skin Absorption: None.

Ingestion: Ingestion is not expected to occur in normal use. However, liquid can cause freeze burn similar to frostbite.

CHRONIC EFFECTS: None.

CARCINOGENICITY: Propane is not listed by NTP, OSHA or IARC.

4. First Aid Measures

INHALATION: Individuals suffering from lack of oxygen should be removed to fresh air. If victim is not breathing, administer artificial respiration. If breathing is difficult, administer oxygen. Obtain immediate medical assistance.

EYE CONTACT: Gently flush eyes with lukewarm water. Obtain immediate medical assistance.

SKIN CONTACT: Remove saturated clothes, shoes and jewelry. Immerse affected area in lukewarm water not exceeding 105° F. Keep immersed. Obtain immediate medical assistance.

INGESTION: If swallowed, obtain immediate medical assistance.

5. Fire-Fighting Measures

FLASH POINT: -156°F (-104°C)

AUTOIGNITION: 842°F (432°C)

IGNITION TEMPERATURE IN AIR: 920°F to 1120°F (493°C to 549°C)

FLAMMABLE LIMITS IN AIR (% by volume): Lower: 2.15% Upper: 9.6%

EXTINGUISHING MEDIA: Dry chemical, CO₂, water spray or fog for surrounding area. Do not attempt to extinguish fire until propane source is isolated.

SPECIAL FIRE-FIGHTING INSTRUCTIONS: Evacuate all unnecessary personnel from the area. Allow only properly trained and protected emergency response personnel in area. A NIOSH approved self-contained breathing apparatus may be required. If gas flow cannot be shut off, do not attempt to extinguish fire. Allow fire to burn itself out. Use high volume water supply to cool exposed pressure containers and nearby equipment. Approach a flame-enveloped container from the sides, never from the ends. Use extreme caution when applying water to a container that has been exposed to heat or flame for more than a short time. For uncontrollable fires and/or when flame is impinging on container, withdraw all personnel and evacuate vicinity immediately.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Propane is heavier than air and can collect in low areas. Flash back along a vapor trail is possible. Pressure in a container can build up due to heat; and, container may rupture suddenly and violently without warning if pressure relief devices fail to function properly. If flames are against the container, withdraw immediately on hearing a rising sound, if venting increases in volume or intensity or if there is discoloration of the container due to fire. Propane released from a properly functioning relief valve on an overheated container can also become ignited.

HAZARDOUS COMBUSTION PRODUCTS: None.

6. Accidental Release Measures

IF MATERIAL IS RELEASED OR SPILLED: Evacuate the immediate area. Eliminate any possible sources of ignition and provide maximum ventilation. Shut off source of propane, if possible. If leaking from container or valve, contact your supplier or AmeriGas immediately.

7. Handling and Storage

HANDLING PRECAUTIONS: Propane vapor is heavier than air and can collect in low areas that are without sufficient ventilation. Conduct system checks for leaks with a leak detector or solution, never with flame. Make certain the container service valve is shut off prior to connecting or disconnecting. If container valve does not operate properly, discontinue use and contact AmeriGas. Never insert an object (e.g., wrench, screwdriver, pry bar, etc.) into pressure relief valve or cylinder valve cap openings. Do not drop or abuse cylinders. Never strike an arc on a gas container or make a container part of an electrical circuit. See Section 16, "OTHER INFORMATION", for additional precautions.

STORAGE PRECAUTIONS: Store in a safe, authorized location (outside, detached storage is preferred) with adequate ventilation. Specific requirements are listed in NFPA 58, LP-GAS CODE. Isolate from heat and ignition sources. Containers should never be allowed to reach temperature exceeding 125°F (52°C). Isolate from combustible materials. Provide separate storage locations for other compressed and flammable gases. Propane containers should be separated from oxygen cylinders or other oxidizers by a minimum distance of 20 feet, or by a barrier of non-combustible material at least 5 feet high having a fire rating of at least 1/2 hour. Full and empty cylinders should be segregated. Keep cylinders in an upright position at all times so that each pressure relief valve communicates with the vapor space. Keep container valve closed and plugged or capped when not in use. Install protective caps when cylinders are not connected for use. Empty containers retain some residue and should be treated as if they were full.

8. Exposure Control / Personal Protection

ENGINEERING CONTROLS

Ventilation: Provide ventilation adequate to ensure propane does not reach a flammable mixture.

RESPIRATORY PROTECTION

General Use: None.

Emergency Use: If concentrations are high enough to warrant supplied-air or NIOSH self-contained breathing apparatus, then the atmosphere may be flammable (See Section 5). Appropriate precautions must be taken regarding flammability.

PROTECTIVE CLOTHING: Avoid skin contact with liquid propane because of possibility of freeze burn. Wear gloves and protective clothing that are impervious to the product for the duration of the anticipated exposure.

EYE PROTECTION: Safety glasses, goggles or face shields are recommended when handling cylinders.

OTHER PROTECTIVE EQUIPMENT: Safety shoes are recommended when handling cylinders.

9. Physical and Chemical Properties

BOILING POINT: @ 14.7 psia = -44° F (@1.00 atm.pressure = -42°C)

SPECIFIC GRAVITY OF VAPOR (Air = 1) at 60° F (15.56°C): 1.50

SPECIFIC GRAVITY OF LIQUID (Water = 1) at 60° F: 0.504

VAPOR PRESSURE: @ 70° F (20°C) = 127 psig; @ 105° F (45°C) = 210 psig; @ 130°F (55°C) = 287 psig

EXPANSION RATIO (From liquid to gas @ 14.7 psia): 1 to 270

SOLUBILITY IN WATER: Slight, 0.1 to 1.0%

APPEARANCE AND ODOR: A colorless and tasteless gas at normal temperature and pressure. An odorant (ethyl mercaptan) is added to provide a strong unpleasent odor. Should a propane-air mixture reach the lower limits of flammability, the ethyl mercaptan concentration will be approximately 0.5 ppm in air.

ODORANT WARNING: Odorant is added to aid in the detection of leaks. One common odorant is ethyl mercaptan, CAS No. 75-08-1. Odorant has a foul smell. The ability of people to detect odors varies widely. Also, the odor level can be reduced by certain chemical reactions with material in the propane system or when fugitive propane gas from underground leaks passes through certain soils. No odorant will be 100% effective in all circumstances. If the presence of the odorant is not obvious, notify AmeriGas immediately.

10. Stability and Reactivity

STABILITY: Stable.

Conditions to Avoid: Keep away from high heat, strong oxidizing agents and sources of ignition.

REACTIVITY:

Hazardous Decomposition Products: Under fire conditions, fumes, smoke, carbon monoxide, aldehydes and other decomposition products. In most applications where there is inadequate venting to the outside air, incomplete combustion will produce carbon monoxide (a toxic gas) and potentially develop concentrations that can create a serious health hazard.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

Propane is non-toxic and is a simple asphyxiant. It has slight anesthetic properties. Higher concentrations may cause dizziness.

IRRITANCY OF MATERIAL: None.

REPRODUCTIVE EFFECTS: None

TERATOGENICITY: None

SENSITIZATION TO MATERIAL: None

MUTAGENICITY: None

SYNERGISTIC MATERIALS: None

12. Ecological Information

No adverse ecological effects are expected. Propane does not contain any Class I or Class II ozone-depleting chemicals (40 CFR Part 82). Propane is not listed as a marine pollutant by DOT (49 CFR Part 171).

13. Disposal Considerations

WASTE DISPOSAL METHOD: Do not attempt to dispose of residual or unused product in the container; return it to your supplier or contact AmeriGas for safe disposal. Residual product within a process system may be burned at a controlled rate if a suitable burning unit is available on site, and is done in accordance with federal, state and local regulations.

14. Transport Information

DOT SHIPPING NAME: Liquefied Petroleum Gas

IDENTIFICATION NUMBER: UN 1075

IMO SHIPPING NAME: Propane

IMO IDENTIFICATION NUMBER: UN 1978

HAZARD CLASS: 2.1 (Flammable Gas)

PRODUCT RQ: None

SHIPPING LABEL (S): Flammable Gas

PLACARD (WHEN REQUIRED): Flammable Gas

SPECIAL SHIPPING INFORMATION: Container must be transported in a well-ventilated vehicle, secured, and in a position such that the pressure relief device is in communication with the vapor space.

15. Regulatory Information

The following information concerns U.S. Federal regulatory requirements potentially applicable to this product. Not all such requirements are identified. Users of this product are responsible for their own regulatory compliance on a federal, state [provincial] and local level.

U.S. FEDERAL REGULATIONS

Environmental Protection Agency (EPA)

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) - 40 CFR Parts 117 and 302

Reportable Quantity (RQ): None

Superfund Amendment and Reauthorization Act (SARA)

- Sections 302/304: Relates to emergency planning on threshold planning quantities (TPQ) and release reporting based on reportable quantities (RQ) of EPA's extremely hazardous substances (40 CFR Part 355).

Extremely Hazardous Substances: None

Threshold Planning Quantity (TPQ): None

- Sections 311/312: Relates to submission of material safety data sheets (MSDSs) and chemical inventory reporting with identification of EPA-defined hazard classes (40 CFR Part 370). The hazard classes for this product are:
IMMEDIATE: No **PRESSURE:** Yes **DELAYED:** No **REACTIVITY:** No **FLAMMABLE:** Yes
- Section 313: Relates to submission of annual reports of release of toxic chemicals that appear in 40 CFR Part 372. Propane does not require reporting under Section 313.

Toxic Substance Control Act (TSCA)

Propane is listed on the TSCA inventory.

Occupational Safety and Health Administration (OSHA)

The following 29 CFR Parts may apply to propane:

29 CFR 1910.110: *Storage and Handling of Liquefied Petroleum Gases*

29 CFR 1910.119: *Process Safety Management of Highly Hazardous Chemicals*

29 CFR 1910.1200: *Hazardous Communications*

Food and Drug Administration (FDA)

21 CFR 184.1655: Generally recognized as safe (GRAS) as a direct human food ingredient when used as a propellant, aerating agent and gas.

16. Other Information

SPECIAL PRECAUTIONS: Use piping and equipment adequately designed to withstand pressure to be encountered. NFPA 58, LP-GAS CODE and OSHA 29 CFR 1910.10 require that all persons employed in handling LP-gases be trained in proper handling and operating procedures, which the employer shall document. Contact your propane supplier or AmeriGas to arrange for the required training. Allow only trained and qualified persons to install and service propane containers and systems.

ISSUE INFORMATION

Issue Date: December 2002
Issued By: Director of Safety

Supersedes Date: April 2002
Phone Number: 1-610-337-7000

This material safety data sheet and the information it contains is offered to you in good faith as accurate. This Supplier does not manufacture this product, but is a supplier of the product that is independently produced by others. Much of the information contained in this data sheet was received from sources outside our Company. To the best of our knowledge this information is accurate, but this Supplier does not guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely, comply with all applicable laws and regulations and to assume the risks involved in the use of this product.

NO WARRANTY OR MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSES, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.



WD-40 Company

Material Safety Data Sheet



1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company	Chemical Name: Organic Mixture
Address: 1061 Cudahy Place (92110) P.O. Box 80607 San Diego, California, USA 92138 -0607	Trade Name: WD-40 Aerosol
Telephone: 1-800-448-9340	Product Use: Cleaner, Lubricant, Penetrant
Emergency only: 1-888-324-7596 (PROZAR)	MSDS Date Of Preparation: 5/16/07
Information: 1-888-324-7596	

2 – Hazards Identification

Emergency Overview:

DANGER! Harmful or fatal if swallowed. Flammable aerosol. Contents under pressure. Avoid eye contact. Use with adequate ventilation. Keep away from heat, sparks and all other sources of ignition.

Symptoms of Overexposure:

Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.

Eye Contact: Contact may be mildly irritating to eyes. May cause redness and tearing.

Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. The liquid contents are an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis.

Chronic Effects: None expected.

Medical Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory conditions may be aggravated by exposure.

Suspected Cancer Agent:

Yes No X

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent
Aliphatic Hydrocarbon	64742-47-8	45-50
	64742-48-9	
	64742-88-7	
Petroleum Base Oil	64742-65-0	15-25
LVP Aliphatic Hydrocarbon	64742-47-8	12-18
Carbon Dioxide	124-38-9	2-3
Non-Hazardous Ingredients	Mixture	<10

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.

Eye Contact: Flush thoroughly with water. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

5 – Fire Fighting Measures

Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

Unusual Fire and Explosion Hazards: Contents under pressure. Aerosol containers may burst under fire conditions. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

6 – Accidental Release Measures

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area. Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Do not puncture or incinerate containers. Keep can away from electrical current or battery terminals. Electrical arcing can cause burn-through (puncture) which may result in flash fire, causing serious injury. Keep out of the reach of children.

Storage: Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	100 ppm TWA (ACGIH) 1200 mg/m ³ TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m ³ TWA (OSHA/ACGIH)
LVP Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA (OSHA/ACGIH), 30,000 ppm STEL (ACGIH)
Non-Hazardous Ingredients	None Established

The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Safety glasses or goggles recommended.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be

based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Boiling Point:	323°F (minimum)	Specific Gravity:	0.817 @ 72°F
Solubility in Water:	Insoluble	pH:	Not Applicable
Vapor Pressure:	110 PSI @ 70°F	Vapor Density:	Greater than 1
Percent Volatile:	74%	VOC:	412 grams/liter (49.5%)
Coefficient of Water/Oil Distribution:	Not Determined	Appearance/Odor	Light amber liquid/mild odor
Flash Point:	131°F (concentrate) Tag Closed Cup	Flammable Limits: (Solvent Portion)	LEL: 1.1% UE:: 8.9%

10 – Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.

Incompatibilities: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

12 – Ecological Information

No data is currently available.

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: Consumer Commodity, ORM-D

IMDG Shipping Description: Aerosols, 2, UN1950

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory
Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification
Canadian WHMIS Classification: Class B-5 (Flammable Aerosol)
This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:
Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Reactivity – 0 (minimal hazard)

SIGNATURE:  TITLE: Director of Global Quality Assurance

REVISION DATE: Revision Date: May 2007 SUPERSEDES: December 2004



HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

ADD DELETE REVISED 1

Page 1 of 1 2

FACILITY ID# 30035 38 BUSINESS NAME Battery Systems Inc 3

I. FACILITY INFORMATION

CHEMICAL LOCATION 12400 Industry St, Garden Grove Ca 92841 4

CONFIDENTIAL LOCATION EPCRA Yes No 5 MAP # 1 6 GRID # D-4 7

II. CHEMICAL INFORMATION

CHEMICAL NAME WASTE Yes 8 TRADE SECRET Yes No 11
If EPCRA see instructions

COMMON NAME Smog Calibration Gas 9 An EHS Chemical Yes No 12
*If EHS is "Yes", all amounts must be LBS

CAS # 10 FIRE CODE HAZARD CLASSES (supplied by GGFD) 13

TYPE (Check one item only) a. PURE b. MIXTURE c. WASTE 14 RADIOACTIVE Yes No 15 CURIES 16

PHYSICAL STATE (Check one item only) a. SOLID b. LIQUID c. GAS 17 FED HAZARD CATEGORIES a. FIRE b. REACTIVE c. PRESSURE RELEASE 18
 d. ACUTE HEALTH e. CHRONIC HEALTH

AVERAGE DAILY AMOUNT 48 19 MAXIMUM DAILY AMOUNT 144 20 ANNUAL WASTE AMOUNT 0 21 STATE WASTE CODE 0 22

UNITS a. GALLONS b. CUBIC FEET 23 DAYS ON SITE 365 24 LARGEST CONTAINER 8 SCF @ 260 PSIG 25
 c. POUNDS d. TONS
*If EHS, amount must be in pounds.

STORAGE CONTAINER (Check all that apply) a. ABOVEGROUND TANK e. PLASTIC DRUM i. VAT m. CYLINDER q. TANK WAGON 26
 b. UNDERGROUND TANK f. NONMETALLIC DRUM l. FIBER DRUM n. GLASS CONTAINER r. RAIL CAR
 c. TANK INSIDE BLDG g. METAL CONTAINER o. PLASTIC CONTAINER s. TOTE BIN
 d. STEEL DRUM h. CARBOY j. BOX(S) p. IN MACH OR EQUIP t. OTHER

STORAGE PRESSURE a. AMBIENT b. ABOVE AMBIENT c. BELOW AMBIENT 27

STORAGE TEMPERATURE a. AMBIENT b. ABOVE AMBIENT c. BELOW AMBIENT d. CRYOGENIC 28

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 8 29	Carbon Monoxide 30	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 31	630-08-0 32
2 12 29	Carbon Dioxide 30	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 31	124-38-9 32
3 3000 ppm 29	Nitric Oxide 30	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 31	10102-43-9 32
4 3200 ppm 29	Propane 30	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 31	74-98-6 32
5 Balance 29	Nitrogen 30	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 31	7727-37-9 32

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

PLACARDING INFORMATION

UNDOT # 1956 33

Refer to shipping papers or MSDS

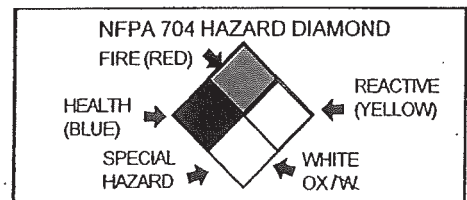
DOT HAZARD CLASS 2.2 34

Refer to shipping papers or MSDS

EPCRA YES NO 35

X 36

If EPCRA, Please Sign Here



MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED



SCOTT_SPECIALTY_GASES

MATERIAL SAFETY DATA SHEETS
DATE: 11/16/06

SUPPLIER ADDRESS: 2600 CAJON BLVD.

SAN BERNARDINO, CA 92411

EMERGENCY PHONE: (909) 887-2571
NUMBER

1. CHEMICAL PRODUCT

PRODUCT NAME: CARBON MONOXIDE, CARBON DIOXIDE, NITRIC OXIDE AND PROPANE IN NITROGEN
SYNONYMS: None

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient Name	Formula	CAS#	Concentration	Exposure Limits (PPM)			
				ACGIH TLV	OSHA PEL	MAC	Other STEL
CARBON MONOXIDE	CO	630-08-0	8 PCT	25	50	25	NE
CARBON DIOXIDE	CO2	124-38-9	12 PCT	5000	5000	5000	30000
NITRIC OXIDE	NO	10102-43-9	3000 PPM	25	25	25	NE
PROPANE	C3H8	74-98-6	3200 PPM	2500	1000	NE	NE
NITROGEN	N2	7727-37-9	BALANCE	S/A	S/A	S/A	S/A

Note: NE = NONE ESTABLISHED
S/A = SIMPLE ASPHYXIANT

3. HAZARD IDENTIFICATION

*** EMERGENCY OVERVIEW ***

High pressure gas.
Can cause rapid suffocation.
Can increase respiration and heart rate.
Acts on blood causing damage to the central nervous system.
Can cause lung damage.
Symptoms of exposure may be delayed.

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY: Inhalation

ACUTE EFFECTS: Mixture can act as a simple asphyxiant by displacing air necessary for life. Symptoms include rapid respiration, muscular incoordination, fatigue, dizziness, nausea, vomiting, unconsciousness, and death. Carbon monoxide is highly toxic by the reduction of blood's oxygen carrying capacity resulting in oxygen starvation of body cells. Symptoms include shortness of breath, headache, confusion, nausea, dizziness, and unconsciousness. Exposure to carbon dioxide at 1-4% concentrations results in increased respiratory volume. Concentrations greater than 4% produce labored breathing and is dangerous for even a few minutes. Nitric oxide forms acids in the lungs which are irritants that cause congestion of the throat and bronchi and edema of the lungs. Symptoms include headache, lowering of blood pressure, dizziness, development of cyanosis and loss of consciousness. Because of its minor irritating effects on the upper respiratory tract, the warning properties are limited.

CHRONIC EFFECTS: Cardiovascular problems. Nitric oxide may cause permanent

Continued ...



3. HAZARD IDENTIFICATION

decrements in pulmonary function.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None

OTHER EFFECTS OF OVEREXPOSURE: None

CARCINOGENICITY (US Only):

- NTP - No
- IARC MONOGRAPHS - No
- OSHA REGULATED - No

4. FIRST AID MEASURES

INHALATION: Immediately remove victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.

EYE CONTACT: None

SKIN CONTACT: None

INGESTION: None

IN EVENT OF EXPOSURE, CONSULT A PHYSICIAN

NOTE TO PHYSICIAN: Victim should be retained for observation. Symptoms of exposure may be delayed.

5. FIRE FIGHTING MEASURES

FLASH POINT: Nonflammable

AUTOIGNITION TEMPERATURE: N/Ap

FLAMMABLE LIMITS: Nonflammable
LOWER:
UPPER:

EXTINGUISHING MEDIA: Use what is appropriate for surrounding fire.

SPECIAL FIRE FIGHTING INSTRUCTION AND EQUIPMENT: Wear self-contained breathing apparatus and full protective clothing. Keep fire exposed cylinders cool with water spray.

HAZARDOUS COMBUSTION PRODUCTS: Nitric

oxide in contact with air forms highly toxic fumes of NOx.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Cylinder rupture may occur under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

CLEAN UP PROCEDURES: Evacuate and ventilate area. Remove leaking cylinder to exhaust hood or safe outdoor area. Shut off source if possible and remove source of heat. Allow gas to discharge at a slow rate into an exhaust hood or safe outdoor area.

SPECIALIZED EQUIPMENT: None

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Secure cylinder when using to protect from falling. Use suitable hand truck to move cylinders.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in well ventilated areas. Keep valve protection cap on cylinders when not in use.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide adequate general and local exhaust ventilation to maintain concentrations below exposure limits and to avoid asphyxiation.

PERSONAL PROTECTION

Continued ...



EYE/FACE PROTECTION: Safety glasses

SKIN PROTECTION: None

RESPIRATORY PROTECTION: In case of leakage, use self-contained breathing apparatus.

OTHER PROTECTIVE EQUIPMENT: Safety shoes when handling cylinders.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless, but if nitric oxide concentration is high, possible reddish brown color.
ODOR: Pungent
PHYSICAL STATE: Gas
VAPOR PRESSURE: N/Av
VAPOR DENSITY (AIR=1): 0.971-1.086
BOILING POINT (C): cm³/100cm³ H₂O 1.485
SOLUBILITY IN WATER: N/Av
SPECIFIC GRAVITY (H₂O=1): Gas
EVAPORATION RATE: Gas
ODOR THRESHOLD: N/Av

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage conditions.

CONDITIONS TO AVOID: Storage in poorly ventilated areas. Storage near a heat source.

MATERIALS TO AVOID: Carbon dioxide, being weakly acidic, reacts with alkaline materials to form carbonates and bicarbonates. Nitrogen reacts with Li, Nd, and Ti at high temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION: In contact with air nitric oxide forms toxic fumes of NO_x.

11. TOXICOLOGICAL INFORMATION

LETHAL CONCENTRATION (LC50): NONE ESTABLISHED
LETHAL DOSE 50 (LD50): N/Av
TERATOGENICITY: N/Av
REPRODUCTIVE EFFECTS: N/Av
MUTAGENICITY: N/Av

12. ECOLOGICAL INFORMATION

No adverse ecological effects are expected.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of non-refillable cylinders in accordance with federal, state and local regulations. Allow gas to vent slowly to atmosphere in an unconfined area or exhaust hood. If the cylinders are the refillable type, return cylinders to supplier with any valve outlet plugs or caps secured and valve protection caps in place.

14. TRANSPORT INFORMATION

CONCENTRATION: .3 - 12%
DOT DESCRIPTION (US ONLY):
PROPER SHIPPING NAME: Compressed gases, n.o.s.
HAZARD CLASS: 2.2 (nonflammable)
IDENTIFICATION NUMBER: UN1956
REPORTABLE QUANTITIES: None
LABELING: NONFLAMMABLE GAS

ADR/RID (EU Only): Class 2,1A

SPECIAL PRECAUTIONS: Cylinders should be transported in a secure upright position in a well ventilated truck.

15. REGULATORY INFORMATION

OSHA: Process Safety Management: The minor components that are listed in appendix A of 29 CFR 1910.119 as a highly hazardous chemicals are: Nitric oxide.

TSCA: Mixture is not listed in TSCA inventory.

SARA: The threshold planning quantity for this mixture is 10,000 lbs.

EU NUMBER: N/Av

NUMBER IN ANNEX 1 OF DIR 67/548: Mixture is not listed in annex 1.

EU CLASSIFICATION: N/Av

R: 23

Continued ...



S: 9

16. OTHER INFORMATION

OTHER PRECAUTIONS: Protect containers from physical damage. Do not deface cylinders or labels. Cylinders should be refilled by qualified producers of compressed gas. Shipment of a compressed gas cylinder which has not been filled by the owner or with his written consent is a violation of federal law (49 CFR).

ABBREVIATIONS:

N/Ap - Not Applicable
N/Av - Not Available
SA - Simple Asphyxiant
NE - None Established

DISCLAIMER: Information included in this document is given to the best of our knowledge, however, no warranty is made that the information is accurate or complete. We do not accept any responsibility for damages by the use of the document.



HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

ADD DELETE REVISED 1

Page 1 of 1 2

FACILITY ID# 3 0 0 3 5 38 BUSINESS NAME Battery Systems Inc 3

I. FACILITY INFORMATION

CHEMICAL LOCATION 12400 Industry St, Garden Grove Ca 92841 4

CONFIDENTIAL LOCATION EPCRA Yes No 5 MAP # 1 6 GRID # D-4 7

II. CHEMICAL INFORMATION

CHEMICAL NAME Ethane, 1,1,1,2- Tetrafluoro- (HFC-134a) WASTE Yes 8 TRADE SECRET Yes No 11
If EPCRA see instructions

COMMON NAME SUVA 134a 9 An EHS Chemical Yes No 12
*If EHS is "Yes", all amounts must be LBS

CAS # 811-97-2 10 FIRE CODE HAZARD CLASSES (supplied by GGFD) 13

TYPE (Check one item only) a. PURE b. MIXTURE c. WASTE 14 RADIOACTIVE Yes No 15 CURIES 16

PHYSICAL STATE (Check one item only) a. SOLID b. LIQUID c. GAS 17 FED HAZARD CATEGORIES a. FIRE b. REACTIVE c. PRESSURE RELEASE 18
 d. ACUTE HEALTH e. CHRONIC HEALTH

AVERAGE DAILY AMOUNT 800 19 MAXIMUM DAILY AMOUNT 1200 20 ANNUAL WASTE AMOUNT 0 21 STATE WASTE CODE 0 22

UNITS a. GALLONS b. CUBIC FEET 23 DAYS ON SITE 365 24 LARGEST CONTAINER 30 lbs 25
 c. POUNDS d. TONS
*If EHS, amount must be in pounds.

STORAGE CONTAINER (Check all that apply) a. ABOVEGROUND TANK e. PLASTIC DRUM i. VAT m. CYLINDER q. TANK WAGON 26
 b. UNDERGROUND TANK f. NONMETALLIC DRUM l. FIBER DRUM n. GLASS CONTAINER r. RAIL CAR
 c. TANK INSIDE BLDG g. METAL CONTAINER o. PLASTIC CONTAINER s. TOTE BIN
 d. STEEL DRUM h. CARBOY j. BAG(S) p. IN MACH OR EQUIP t. OTHER

STORAGE PRESSURE a. AMBIENT b. ABOVE AMBIENT c. BELOW AMBIENT 27

STORAGE TEMPERATURE a. AMBIENT b. ABOVE AMBIENT c. BELOW AMBIENT d. CRYOGENIC 28

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 100 29	Ethane, 1,1,1,2- Tetrafluoro 30	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 31	811-97-2 32
2 29		<input type="checkbox"/> Yes <input type="checkbox"/> No 31	32
3 29		<input type="checkbox"/> Yes <input type="checkbox"/> No 31	32
4 29		<input type="checkbox"/> Yes <input type="checkbox"/> No 31	32
5 29		<input type="checkbox"/> Yes <input type="checkbox"/> No 31	32

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

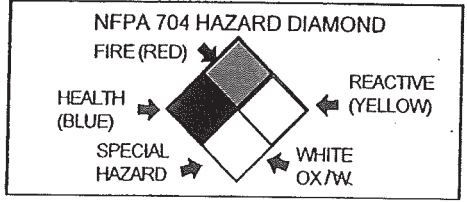
PLACARDING INFORMATION

UNDOT # 3159 33 Refer to shipping papers or MSDS

DOT HAZARD CLASS 2.2 34 Refer to shipping papers or MSDS

EPCRA YES NO 35

X 36 If EPCRA, Please Sign Here



MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED