1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT INFORMATION

Product Name: Lead Acid Battery

Product Synonyms:
Generic MSDS
Wet, Filled with Acid Battery
Battery

External Keys:

Battery	Distributable Material (Part #)

MANUFACTURER INFORMATION

Manufacturer: General Motors Corporation - Chemical Risk Management

Address:

2000 Centerpoint Parkway	USA	Michigan	48341-3146	Pontiac	Mail code: 483-520-192	Mailing

Communication Lines:

Phone	248-753-5592	General information
Phone	800-814-3390	GM Global Security (after hours, weekends and holidays)

Comment:
Prepared By: Mariann Anticoli

2 INGREDIENT INFORMATION

FORMULATION

Ingredients:

Chemical Name	CAS Number	Prefix	Value	Unit	Exposure Limits
PROPENE POLYMERS	9003-07-0	Range	1 - 10	%Wt	No
POLYETHYLENE	9002-88-4	Range	1 - 10	%Wt	No
LEAD	7439-92-1	Range	27 - 70	%Wt	Yes
SULFURIC ACID	7664-93-9	Range	11 - 44	%Wt	Yes
LEAD DIOXIDE	1309-60-0	Range	31 - 48	%Wt	No
WATER	7732-18-5	<	26	%Wt	No
ANTIMONY	7440-36-0	Range	0 - 4	%Wt	Yes
ARSENIC	7440-38-2	<	0.01	%Wt	Yes
CALCIUM	7440-70-2	<	1	%Wt	No
LEAD(II) SULFATE (1:1)	7446-14-2	<	1	%Wt	No

Comment:
This Material Safety Data Sheet is a combination of four different formulations (HMCS ID 121229, 198671, 206182 and 1185302). For more information, please contact General Motors WFG-Chemcial Risk Management.

3 HAZARDS IDENTIFICATION

Hazards Overview:
Emergency Overview: Danger! Explosive gases. Poison! Causes severe burns. Wet Storage Battery is a manufactured article composed of lead and acid encased in polypropylene, sealed and vented with a flame arrestor to reduce flashback potential. The case color varies. These batteries contain dilute sulfuric acid, a corrosive substance, and may expel explosive gases.

Specific Hazards:
Routes of Entry: Not applicable under normal use.

Specific Hazards (Routes Of Exposure):

Exposure Routes	Exposure Duration	Observation
Inhalation	General	Acid mist generated during battery formation may cause respiratory irritation. Spillage of acid from batteries in confined areas may also lead to exposure to sulfuric acid mist. Breathing of mist may produce respiratory irritation and difficulty.
Eye Contact	General	Sulfuric acid (7664-93-9) is a corrosive chemical. Vapors or mist can cause severe irritation, burns, cornea damage, and possible blindness. Lead compounds may cause irritation. Severity depends

Exposure Routes	Exposure Duration	Observation
		on acid concentration and duration of contact.
Skin Contact	General	Sulfuric acid (7664-93-9) is a corrosive chemical. Mists or liquid irritates the skin and may cause chemical burns and ulcerations. Severity depends on acid concentration and duration of contact. Skin absorption: skin absorption is not a significant route of entry. Sulfuric acid is not readily absorbed through skin. Lead compounds are not readily absorbed through skin.
Ingestion	General	Hands contaminated by contact with internal components of a battery can cause ingestion of lead/lead compounds (7439-92-1). Hands should be washed prior to eating, drinking, or smoking. Repeated prolonged exposure may damage tooth enamel. Sulfuric acid may cause severe irritation or burns of the mouth, throat, esophagus, and stomach. Lead compounds may cause abdominal pain, nausea, headaches, vomiting, diarrhea, and severe cramping. Acute ingestion should be treated by physician.

Medical Conditions Aggravated By Exposure:
Inorganic lead and its compounds can aggravate chronic forms of kidney, liver, and neurological diseases. Pregnant women and children must be protected from lead exposure. Contact of battery electrolyte (acid) with the skin may aggravate skin diseases such as eczema and contact dermatitis. Sulfuric acid may aggravate medical conditions such as pulmonary edema, bronchitis, emphysema, dental erosion, and tracheobronchitis.

Additional Health Hazard Data:
Target Organs: (Electrolyte: Sulfuric Acid) respiratory system, eyes, skin and teeth.

4 FIRST AID MEASURES

First Aid By::

Inhalation	Sulfuric acid (7664-93-9): Remove to fresh air immediately. If breathing is difficult, give oxygen. Lead compounds: Remove from exposure, gargle, wash nose and eyes, and consult physician
Skin Contact	Sulfuric acid (7664-93-9): Flush with large amounts of water for at least 15 minutes, remove any contaminated clothing and do not wear again until cleaned. If acid is splashed on shoes, remove and clean. Acid cannot be removed from leather. Seek medical attention if necessary. Lead compounds are not readily absorbed through the skin.
Eye Contact	Sulfuric acid (7664-93-9): Flush immediately with cool water for at least 15 minutes, then consult physician. Lead compounds: Flush immediately with cool water for at least 15 minutes, then consult physician. Do not use eye drops or other medication unless advised to do so by a doctor.
Ingestion	Sulfuric acid (7664-93-9): Give large quantities of water. DO NOT induce vomiting, consult physician. Lead compounds: Consult a physician. DO NOT induce vomiting. If conscious, drink large quantities of milk or water. Follow with milk of magnesia, beaten egg, egg white or vegetable oil.

5 FIRE FIGHTING MEASURES

Flash Point:

=	498	F	(259 C.; Hydrogen gas) (Product: N/A).

Explosive Limits:

Lower Explosive Limit (LEL)	Range	4.1 - 4.65	'%'	(Hydrogen)
Upper Explosive Limit (UEL)	Range	74.2 - 93.9	'%'	(Hydrogen)

Autoignition Temperature:

=	1076	F	(580 C.; Hydrogen gas)

Extinguishing Media:
Class ABC extinguisher, carbon dioxide, foam, halon, water, or dry chemical.

Fire and Explosion Hazards:
Hydrogen and oxygen gases are produced in the cells during normal battery operation or when on charge (hydrogen is highly flammable and oxygen supports combustion). These gases enter the air through the vent caps. To avoid risk of fire or explosion, keep sparks and other sources of ignition away from the battery, and ensure that adequate ventilation is provided. Do not allow metallic material to simultaneously contact both the positive and negative terminals of batteries. Sulfuric acid is an oxidizer and can ignite combustibles upon contact.
Hazardous Combustion Products or gases: Acid mists and vapors, toxic fumes from burning plastic.

Special Fire Fighting Procedures:
If batteries are on charge, turn off power. Cool exterior of battery if exposed to fire to prevent rupture. Acid mists and vapors in a fire are

corrosive. Water applied to electrolyte generates heat and causes it to splatter. Wear protective clothing and use self-contained breathing apparatus (SCBA). Wear acid resistant clothing.

6 ACCIDENTAL RELEASE MEASURES

PRECAUTIONS IN CASE OF ACCIDENTAL RELEASE

Personal Precautions:
Wear acid-resistant boots, chemical face shield, chemical splash goggles, and acid-resistant gloves.

SPILL OR LEAK PROCEDURES

Recovery:
Small spill: Neutralize the spill with baking soda, household ammonia and/or water. Rinse clean. Large spill: Remove combustible materials and all sources of ignition. Stop flow of material and contain spill by diking with soda ash (sodium carbonate) or quick lime (calcium oxide). Carefully neutralize spill with soda ash, etc. Mix well. Make certain mixture is neutral, then collect residue and place in a drum or other suitable container. Dispose of as hazardous waste per local, state and federal waste regulations. If battery is leaking, place battery in a heavy-duty plastic bag. DO NOT RELEASE UNNEUTRALIZED ACID. When exposure level is unknown, wear NIOSH approved positive pressure self-contained breathing apparatus. Reference the Emergency Response Guidebook 2004, #154.

7 HANDLING AND STORAGE

HANDLING

Safe Handling Procedures:
Use a battery carrier to lift battery or place hands at opposite corners to avoid spilling acid through the vents. Avoid contact with internal components of batteries. Do not tilt batteries to an angle greater than 45 degrees. Do not smoke when working near a battery. Avoid contact with internal components of the batteries. Wash hands thoroughly before eating, drinking or smoking after handling batteries.
Protective measures to be taken during non-routine tasks including equipment maintenance: Charged batteries can present an electrical hazard. Take all appropriate precautions.

STORAGE

Storage Conditions:
Storage Temperature: Min: -20°F (-28°C) for fully charged batteries. 20°F (-6°C) for completely discharged batteries. Max: 80°F (26°C) for low shelf discharge but up to 100°F (38°C) is safe.
Shelf Life: Not determined.
Special Sensitivity: Avoid direct conductive connection across positive and negative terminals to prevent short circuit.
Storage Precautions: Batteries must be kept in an upright position away from ignition sources. Place cardboard between layers of stacked batteries to avoid damage and short circuit. Do not stack loaded pallets or racks on top of other batteries. Do not allow metallic materials to simultaneously contact both terminals. Store batteries in cool, well-ventilated location. Keep a supply of neutralizing agent in or near the storage area for emergency use. Storage area should be equipped with containment capabilities to capture acid spills. Avoid storage in areas exposed to heat or solar buildup. When batteries are completely discharged, the electrolyte will freeze when stored below 20°F. Fully charged batteries may be stored at temperatures as low as -20°F.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:
Ventilation must be provided when charging in an enclosed area per 29CFR1910.178(g) and .305(j)(7). Store and handle lead acid batteries in well-ventilated areas. Make certain vent caps are on tightly. Room ventilation is required for batteries utilized for standby power generation. Never recharge batteries in an unventilated, enclosed space. Local/building/fire codes may require explosion proof fans and equipment. Follow all manufacturer's recommendations when stacking or palletizing. Do not allow metallic materials to simultaneously contact both the positive and negative terminals of the batteries. Use a battery carrier to lift battery or place hands on opposite corners to avoid spilling acid through the vents. Avoid contact with internal components of the batteries. An eyewash fountain and safety shower should be located in or near the production or storage area(s) for lead/lead acid batteries.

EXPOSURE LIMITS

Limit Values:

Chemical Name	CAS Number	Type	Value	Specification	Source
LEAD	7439-92-1	PEL-TWA	50ug/m3	-	OSHA - Permissible Exposure Limits (PELs)
LEAD	7439-92-1	PEL-Action Level	30ug/m3	-	OSHA - Permissible Exposure Limits (PELs)
LEAD	7439-92-1	GM OEG-TWA	50ug/m3	-	GM

Chemical Name	CAS Number	Type	Value	Specification	Source
LEAD	7439-92-1	TLV-TWA	50ug/m3	-	Occupational Exposure Guidelines (OEG) Threshold Limit Values (TLVs) - ACGIH
LEAD	7439-92-1	State-TWA	50ug/m3	-	MICHIGAN
SULFURIC ACID	7664-93-9	PEL-TWA	1mg/m3	-	OSHA - Permissible Exposure Limits (PELs)
SULFURIC ACID	7664-93-9	GM OEG-TWA	1mg/m3	-	GM Occupational Exposure Guidelines (OEG)
SULFURIC ACID	7664-93-9	TLV-TWA	1mg/m3	-	Threshold Limit Values (TLVs) - ACGIH
SULFURIC ACID	7664-93-9	TLV-STEL	3mg/m3	-	Threshold Limit Values (TLVs) - ACGIH
SULFURIC ACID	7664-93-9	State-TWA	1mg/m3	-	MICHIGAN
SULFURIC ACID	7664-93-9	State-TWA	1mg/m3	-	NEW YORK
SULFURIC ACID	7664-93-9	State-TWA	1mg/m3	-	TENNESSEE
SULFURIC ACID	7664-93-9	GM OEG-STEL	3mg/m3	-	GM Occupational Exposure Guidelines (OEG)
ANTIMONY	7440-36-0	PEL-TWA	500ug/m3	-	OSHA - Permissible Exposure Limits (PELs)
ANTIMONY	7440-36-0	GM OEG-TWA	500ug/m3	-	GM Occupational Exposure Guidelines (OEG)
ANTIMONY	7440-36-0	TLV-TWA	500ug/m3	-	Threshold Limit Values (TLVs) - ACGIH
ANTIMONY	7440-36-0	State-TWA	500ug/m3	-	MICHIGAN
ANTIMONY	7440-36-0	State-TWA	500ug/m3	-	NEW YORK
ANTIMONY	7440-36-0	State-TWA	500ug/m3	-	TENNESSEE
ARSENIC	7440-38-2	PEL-TWA	10ug/m3	-	OSHA - Permissible Exposure

Chemical Name	CAS Number	Type	Value	Specification	Source
ARSENIC	7440-38-2	GM OEG-TWA	10ug/m3	-	Limits (PELs) GM Occupational Exposure Guidelines (OEG)
ARSENIC	7440-38-2	TLV-TWA	10ug/m3	-	Threshold Limit Values (TLVs) - ACGIH
ARSENIC	7440-38-2	State-TWA	10ug/m3	-	MICHIGAN

Comment:
Note: Under normal conditions of use, sulfuric acid (7664-93-9) vapors and mist are not generated. Sulfuric acid vapors and mist may be generated when product is overheated, oxidized, or otherwise processed or damaged.
Under normal conditions of use, lead (7439-92-1) dust, vapors, and fumes are not generated. Hazardous exposure to lead may occur when product is overheated, oxidized, or otherwise processed or damaged to create lead dust, vapor, or fumes.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE):

Respiratory Protection	Not required under normal conditions. During battery formation (high-rate charge condition), acid mist can be generated, which may cause respiratory irritation. If irritation occurs, wear a respirator suitable for protection against acid mist. If concentrations of sulfuric acid mist are known to exceed the PEL or employee experiences respiratory irritation, use NIOSH or MSHA approved respiratory protection
Eye Protection	Chemical splash goggles or face shield worn over safety glasses with solid side shields.
Hand Protection	Rubber, neoprene, vinyl-coated, PVC or plastic acid resistant gloves with elbow length gauntlet.
Skin Protection	Acid resistant apron. Under severe exposure or emergency conditions, wear acid resistant clothing with rubber/neoprene boots or steel-toed rubber/neoprene boots for major spill clean up. Place pant legs over boots to keep acid out of boots. All footwear must meet requirements of ANSI Z41.1-1991.

Hygiene Measures:
Good personal hygiene and work practices are required. Upon skin contact, wash thoroughly with soap and water. Keep work areas clean. Wash hands thoroughly before eating, drinking or smoking after handling batteries.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Comment:
Battery Electrolyte (sulfuric acid) (7664-93-9) is a clear to cloudy liquid with slight acidic to pungent odor. Acid saturated lead oxide is a dark reddish-brown to gray solid with slight acidic odor.

PHYSICAL PROPERTIES

pH Value:

Concentrate	<	1.0	(dilute sulfuric acid).

Changes of State:

Melting/Freezing Point	>	300	F	(Lead = 327.4 C.; 149 C. for battery case.) (Melting point).
Boiling Point	Range	229 - 248	F	Electrolyte acid; lead = 3191ºF (1755ºC).

Vapor Pressure:

Range	10 - 13	mmhg	(Battery electrolyte (acid) @20 C.)

Vapor Density:

>	1	(AIR = 1): Battery electrolyte (acid) = > 1.

Evaporation Rate:

<	1	(Butyl acetate = 1).

Specific Gravity:
Range 1.210 - 1.350 (H20 = 1).

Solubility:
Water (lead and lead dioxide are not soluble. Battery electrolyte (acid) is 100% soluble in water.)

Total Amount Of::
Percent Volatile by Weight Not Applicable

10 STABILITY AND REACTIVITY

STABILITY INFORMATION

Stability Under Normal Conditions: Stable

Conditions to Avoid:
Sparks and other sources of ignition may ignite hydrogen gas. Use only approved charging methods. Avoid prolonged overcharge and overheating. Avoid short-circuiting. Avoid sparks and other ignition sources. Keep away from oxidizing and reducing materials. Do not open, break or melt the casing.

Incompatible Materials:
Avoid heat, open flames, sparks, strong oxidizing or reducing agents. Battery electrolyte (acid): Combustible materials, strong reducing agents, most metals, carbides, organic materials, chlorates, nitrates, picrates, water, and fulminates. Contact with metals may product toxic sulfur dioxide fumes and may release flammable hydrogen gas. Combination of sulfuric acid with combustibles, and organic materials may cause fire and explosion. Lead/lead compounds: Potassium, carbides, sulfides, peroxides, phosphorus, sulfur.

Hazardous Polymerization:
Polymerization will not occur. Conditions to avoid: high temperature. Battery electrolyte (acid) will react with water to produce heat. Can react with oxidizing or reducing agents.

HAZARDOUS DECOMPOSITION

Reactions:

Type of Reaction	Reaction Products
Decomposition	Can emit highly toxic fumes when heated. Combustion can produce carbon dioxide and carbon monoxide. Will release an explosive hydrogen/oxygen gas mixture. Oxides of lead and sulfur, lead, and/or lead compounds may be released. Contact with strong acid or base or presence of newly generated hydrogen may result in highly toxic arsine gas. Battery electrolyte (acid) may release hydrogen, carbon monoxide, sulfur dioxide, sulfur trioxide, and sulfur acid mist.

11 TOXICOLOGICAL INFORMATION

OCCUPATIONAL EXPERIENCES

Occupational Experiences By Chemical:

Chemical Name	CAS Number	Observation
SULFURIC ACID	7664-93-9	Acute - Sulfuric acid may cause severe skin irritation and burns, upper respiratory irritation, damage to cornea, and possible blindness. If a large area of skin is damaged, exposure is accompanied by shock, collapse and symptoms similar to those see in burns. Lead compounds may cause abdominal pain, nausea, headaches, vomiting, diarrhea, severe cramping, and difficulty in sleeping. Chronic - Sulfuric acid may lead to scarring of the cornea, inflammation of nose, throat and bronchial tubes, dermatitis, and possible erosion of tooth enamel. Lead compounds may cause anemia, and damage to the kidneys and nervous system. May cause reproductive harm in both males and females

CLASSIFICATION OF INGREDIENTS

Carcingenicity:
Human studies are inconclusive regarding lead (7439-92-1) exposure and an increased cancer risk. The EPA and the International Agency for Research on Cancer (IARC) have categorized lead and inorganic lead compounds as a B2 (EPA) and 2B (IARC) classification (probable/possible human carcinogen) based on sufficient animal evidence and inadequate human evidence. The National Toxicology Program (NTP) has categorized lead as “Reasonably Anticipated to Be a Human Carcinogen.”
The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mist containing sulfuric acid (7664-93-9)" as a Category 1 carcinogen, a substance that is carcinogenic to humans. The ACGIH has classified “strong inorganic acid mist containing sulfuric acid” as an A2 carcinogen (suspected human carcinogen). These classifications do not apply to liquid forms of sulfuric acid or sulfuric acid solutions contained within a battery. Inorganic acid mist (sulfuric acid mist) is not generated

under normal use of this product. Misuse of the product, such as overcharging may, however, result in the generation of sulfuric acid mist. Arsenic (7440-38-2) is listed by the National Toxicology Program (NTP), IARC, OSHA, and NIOSH as a carcinogen only after prolonged exposure to high levels.
California Proposition 65 Warning: Batteries, battery posts, terminals, and related accessories contain lead, lead compounds, and other chemicals known to the State of California to cause cancer. Wash hands after handling.

Reproductive Effects:

Lead compounds (7439-92-1) may cause reproductive harm in both males and females
Reproductive Effects: Lead (7439-92-1) – severe toxicity can cause sterility, abortion, and neonatal mortality and morbidity. Sulfuric Acid (7664-93-9)– experimental teratogen.
California Proposition 65 Warning: Batteries, battery posts, terminals, and related accessories contain lead, lead compounds, and other chemicals known to the State of California to cause birth defects or other reproductive harm. Wash hands after handling.

12 ECOLOGICAL INFORMATION

ENVIRONMENTAL IMPACT

Comment:

There are no data available on the battery itself. Due caution should be exercised to prevent release of the electrolyte material to the aquatic or terrestrial environment. Runoff from fire control may cause a pollution hazard. Environmental Fate: Lead is a naturally occurring element that does not break down readily in soil or water but its compounds are changed by air, water, and sunlight. If released to air, the residence time is approximately 10 days, depending on weather conditions. Lead is strongly adsorbed onto soil particles and sediment, resulting in little mobility with a residence time of many years. The tendency of inorganic lead to be tightly bound to soil results in little availability to terrestrial plants, to which adverse effects are normally only observed at very high concentrations (100 to 1000 mg/kg). Lead is ubiquitous in most surface and ground water systems, and tends to form highly insoluble salts, and complexes with various anions, which precipitate out of the water column. Bioavailability of lead is lowered by ion exchange with hydrous oxides, clays, or by chelation with humic or fulvic acids, and in general when organic material, sediment, and small clay particles are present. In the dissolved phase, lead is bioaccumulated by plants and animals, in both aquatic and terrestrial environments.
Sulfuric acid in the air will react with other chemicals present (e.g., ammonia, magnesium, calcium) to form salts that neutralize the acid. The acid particles or droplets dissolve in the atmosphere and may result in dilute acid solutions. In the aquatic environment, the availability and toxicity of sulfuric acid is dependent on the buffering capacity and resulting pH of the water.

ECOTOXICITY

Comment:

In aquatic systems with low buffering capacity, lead is particularly detrimental to plants, birds, and aquatic organisms. LC50 (28 day) rainbow trout 0.22 mg/kg (lead salt); EC50 (48 hour) daphnid 3.6 ppm (lead salt). Lead may inhibit nitrification and denitrification in activated sludge. Small quantities of sulfuric acid will be neutralized by the natural alkalinity in aquatic systems. Larger quantities may lower the pH for extended periods of time, and the resulting increased acidity (e.g., pH 5 or below) may adversely affect invertebrate and fish populations. Sulfuric acid had moderate acute toxicity on aquatic life (LC50s for invertebrates and fish from 10 to 300 mg/L). It is corrosive to plants, birds, or animals exposed. It has moderate chronic toxicity to aquatic life.

13 DISPOSAL CONSIDERATIONS

Waste Disposal Information:

Wet storage batteries are recyclable and should be turned over to a licensed battery recycler. Do not incinerate. Sulfuric acid (7664-93-9): Neutralize as for a spill; collect residue and place in suitable container; dispose as hazardous waste in accordance with local, state and federal regulations.
Batteries: Send to lead recycling facility following applicable federal, state, and local regulations. Contact Battery Dealer for further information on the proper routine disposition of spent batteries.
Comply with all federal, state and local regulations. Do not flush lead contaminated acid into the sewers, on the ground or into any body of water.

14 TRANSPORT INFORMATION

DOT Shipping Name:

Battery Wet, Filled with Acid.

DOT Hazard Class:

8

DOT UN Code:

UN2794

DOT Packing Group:

III

Comment:

Label(s) Required: Corrosive
Canadian TDG Information:
TDG Shipping Name: Batteries, Wet Filled with Acid
Hazard Class: 8
ID Number: UN 2794
Packing Group: III
Special Label or Marking Requirements: Corrosive

International Air Information (IATA Classification):
Proper Shipping Name: Batteries, Wet Filled with Acid
Hazard Class: 8
ID Number: UN 2794
Packing Group: III
Special Label or Marking Requirements: Corrosive
International Ocean Information (IMO Classification):
Proper Shipping Name: Batteries, Wet Filled with Acid
Hazard Class: 8
ID Number: UN 2794
Packing Group: III
Marine Pollutant: No
Special Label or Marking Requirements: Corrosive

15 REGULATORY INFORMATION

LABELLING

Hazard Codes:

NFPA Health	3
NFPA Flammability	0
HMIS Health	3
HMIS Flammability	0
HMIS Reactivity	2
HMIS Reactivity	2

Comment:
NFPA Codes: Sulfuric Acid. NFPA Codes: Lead: Health = 3, Flammability = 0, Reactivity = 0. NOTE: Sulfuric Acid (7664-93-9) is water-reactive if concentrated. HMIS X = Acid.

NATIONAL REGULATIONS

SARA 311/312: Yes
SARA 313: Yes
Immediate Health: Yes
Delayed Health: Yes
Fire: No
Sudden Pressure Release: No
Reactive: No
RCRA:

Hazardous Waste Number	Hazardous Waste
D002	Spent lead-acid batteries are not regulated as hazardous waste when recycled. Spilled sulfuric acid (7664-93-9) is a characteristic hazardous waste.

Other Regulation:

TSCA:	All ingredients are listed on the EPA TSCA Inventory.
SARA Sections 302/304:	This product contains sulfuric acid (CAS #7664-93-9), an extremely hazardous substance (40 CFR 355.30), that may be subject to the reporting requirements of Sections 302/304, (only acid aerosols including mists, vapors, gas, fog, and other airborne forms) of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and 40 CFR Parts 355, 370 and 372 (Community Right-to-Know).
SARA Sections 311/312:	This product contains sulfuric acid (CAS #7664-93-9), an extremely hazardous substance (40 CFR 355.30), that may be subject to the reporting requirements of Sections 311/312 (only acid aerosols including mists, vapors, gas, fog, and other airborne forms) of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and 40 CFR Parts 355, 370 and 372 (Community Right-to-Know). This product contains lead (CAS #7439-92-1) and lead

	compounds, chemicals that may be subject to the reporting requirements of Sections 311/312 of SARA, and 40 CFR Parts 370 and 372 (Community Right-to-Know).
SARA 313:	This product contains sulfuric acid (CAS #7664-93-9), an extremely hazardous substance (40 CFR 355.30), that may be subject to the reporting requirements of Section 313 (only acid aerosols including mists, vapors, gas, fog, and other airborne forms) of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and 40 CFR Parts 355, 370 and 372 (Community Right-to-Know). This product contains lead (CAS #7439-92-1) and lead compounds, chemicals that may be subject to the reporting requirements of Section 313 of SARA, and 40 CFR Parts 370 and 372 (Community Right-to-Know).
CERCLA/SUPERFUND:	Reportable Quantity (RQ) for spilled 100% sulfuric acid (7664-93-9) is 1000 lbs, antimony (7440-36-0) is 5000 lbs, and arsenic (7440-38-2) is 1 lb.
EPCRA (Emergency Planning and Community Right to Know ACT):	Sulfuric acid (7664-93-9) is a listed “Extremely Hazardous Substance” under EPCRA with a Threshold Planning Quantity (TPQ) of 1000 lbs.
EPCRA (Emergency Planning and Community Right to Know ACT):	EPCRA Section 312 Tier II reporting required for batteries if sulfuric acid (7664-93-9) is present in quantities of 500 lbs or more and/or lead (7439-92-1) is present in quantities of 10,000 lbs or more.

STATE/LOCAL REGULATIONS

Comment:

California Proposition 65 Warning: Batteries, battery posts, terminals, and related accessories contain lead, lead compounds, and other chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

16 OTHER INFORMATION

Comments:

Additional Exposure Limits: GM Occupational Exposure Guidelines (OEG) and State-TWA's were provided by General Motors.