

SAFETY DATA SHEET

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: ACDelco Lead Acid Battery, Wet (Conventional)
Product Code: Not available.

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Use: Automotive, Truck, Marine, etc.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: ACDelco
6200 Grand Pointe Drive
Grand Blanc, MI 48439 USA
Imported into Canada by General Motors of Canada Company,
1908 Colonel Sam Drive, Oshawa, ON L1H 8P7 CANADA

Telephone Number: 1-800-223-3526

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: Infotrac: 1-800-535-5053

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012

The classification given below is designated for battery acid and lead/lead compounds only:

Hazard class

Acute toxicity 2 - inhalation
Acute toxicity 4 - oral, dermal
Skin corrosion 1A
Serious eye damage 1
Carcinogenicity 1A
Reproductive toxicity 1A
Specific target organ toxicity - Repeated exposure 2

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012

Hazard Pictogram:



Signal Word: Danger

Hazard Statement: Fatal if inhaled. Harmful if swallowed and in contact with skin. Causes severe skin burns and eye damage. May cause cancer. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Prevention: Use only outdoors or in a well-ventilated area. In case of inadequate ventilation, wear respiratory protection. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use.

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Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray.

Response:

If exposed or concerned: Get medical advice/attention. If on skin (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center/doctor.

Storage:

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3 ADDITIONAL INFORMATION

Hazards not otherwise classified: Causes severe damage to the respiratory tract.

Unknown acute toxicity: Not applicable.

WHMIS Classification(s):

- Class D1A - Very Toxic Material (inhalation)
- Class D2A - Carcinogenicity
- Class D2A - Reproductive Toxicity
- Class D2A - Teratogenicity and Embryotoxicity
- Class D2A - Mutagenicity
- Class D2A - Chronic Toxic Effects
- Class E - Corrosive Material

WHMIS Hazard Symbols:



WHMIS Signal Word:

DANGER

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

| Ingredient | CAS No | Wt. % |
|-----------------|-----------|---------|
| Lead, elemental | 7439-92-1 | 34 - 70 |
| Sulfuric acid | 7664-93-9 | 15 - 40 |
| Lead Dioxide | 1309-60-0 | 15 - 40 |
| Lead sulfate | 7446-14-2 | 0.1 - 1 |

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

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This SDS is designated for battery acid (sulfuric acid) and lead only. The case is composed of polypropylene.

Section 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF THE FIRST AID MEASURE

- Eye:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
- Skin:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.
- Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Eye:** Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
- Skin:** Harmful in contact with skin. Causes severe skin burns. Symptoms may include redness, pain, blisters.
- Inhalation:** Fatal if inhaled. Causes severe damage to the respiratory tract.
- Ingestion:** Harmful if swallowed. May cause stomach distress, nausea or vomiting. May cause burns.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

- Note to Physicians:** Symptoms may not appear immediately.
- Specific Treatments:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

- Flammability:** Not flammable by WHMIS/OSHA criteria.

5.2 EXTINGUISHING MEDIA

- Suitable Extinguishing Media:** Powder, foam, carbon dioxide.
- Unsuitable Extinguishing Media:** Do not use a solid water stream as it may scatter and spread fire.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

- Products of Combustion:** May include, and are not limited to: oxides of carbon, oxides of sulfur, hydrogen sulfide, hydrogen gas, arsine.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

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5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Beware of acid splatter during water application.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

Methods for Containment: Stop leak if safe to do so. Contain spill, neutralize with sodium bicarbonate, scoop up material and wash surface with water. Do not wash un-neutralized product into sewers or waterways. If on site neutralization is not possible, absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container.

Methods for Cleaning-Up: Cautiously neutralize spilled liquid. Scoop up material and place in a disposal container. Provide ventilation.

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handling: Reaction with metals causes release of hydrogen. Keep away from combustible materials. Do not get in eyes, on skin, or on clothing. Do not swallow. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Only charge battery in a well-ventilated area as an explosive gas mixture may form during charging. Handle carefully. Do not eat, drink or smoke when using this product. (See section 8)

General Hygiene Advice: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage: Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Store in corrosive resistant container with a resistant inner liner. Store locked up. (See section 10)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Exposure Guidelines

| Occupational Exposure Limits | | |
|------------------------------|----------------------|-------------------------|
| Ingredient | OSHA-PEL | ACGIH-TLV |
| Lead, elemental | 50 µg/m ³ | 0.050 mg/m ³ |
| Sulfuric acid | 1 mg/m ³ | 0.2 mg/m ³ |
| Lead Dioxide | Not available. | Not available. |
| Lead sulfate | Not available. | Not available. |

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8.2 EXPOSURE CONTROLS

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

8.3 INDIVIDUAL PROTECTIVE MEASURES

Personal Protective Equipment:

Eye/Face Protection: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

Skin Protection:

Hand Protection: Wear chemically resistant protective gloves.

Body Protection: Wear suitable protective clothing.

Respiratory Protection: A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

General Health and Safety Measures: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

This SDS is designated for battery acid and lead/lead compounds only.

| | |
|---|---|
| Appearance: | Clear (battery acid) |
| Color: | Not available. |
| Odor: | Sharp penetrating, pungent odor (battery acid) |
| Odor Threshold: | Not available. |
| Physical State: | Liquid (battery acid) |
| pH: | Not available. |
| Melting Point/Freezing Point: | 327.4 °C (621.32 °F) (lead) |
| Initial Boiling Point and Boiling Range: | Not applicable unless individual components exposed. 95 – 116 °C (203 - 240 °F) (battery acid) 1755 °C (3191 °F) (lead) |
| Flash Point: | Not available. |
| Evaporation Rate: | Not available. |
| Flammability: | Not flammable. |
| Lower Flammability/Explosive Limit: | Not available. |
| Upper Flammability/Explosive Limit: | Not available. |
| Vapor Pressure: | 11.7 mm Hg @ 20 °C (68 °F) (battery acid) |
| Vapor Density: | Not available. |

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| | |
|--|-------------------------|
| Relative Density/Specific Gravity: | 1.215 - 1.350 |
| Solubility: | Soluble. (battery acid) |
| Partition coefficient: n-octanol/water: | Not available. |
| Auto-ignition Temperature: | Not available. |
| Decomposition Temperature: | Not available. |
| Viscosity: | Not available. |
| Explosive Properties: | Not available. |
| Oxidizing Properties: | Not available. |

Section 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

Reaction with metals causes release of hydrogen. Charging may cause explosive gases.

10.2 CHEMICAL STABILITY

Stable under normal storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

10.4 CONDITIONS TO AVOID

Heat. Incompatible materials. Prolonged overcharge at high current.

10.5 INCOMPATIBLE MATERIALS

Metals. Bases. Organic compounds. Strong oxidizing agents. Strong reducing agents. Water.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon, oxides of sulfur, hydrogen sulfide, hydrogen gas, arsine.

Section 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Symptoms related to physical/chemical/toxicological characteristics:

Eye: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

Skin: Harmful in contact with skin. Causes severe skin burns. Symptoms may include redness, pain, blisters.

Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. May cause burns.

Inhalation: Fatal if inhaled. Causes severe damage to the respiratory tract.

Acute Toxicity:

| Ingredient | LC50 | LD50 |
|-----------------|---|----------------------|
| Lead, elemental | Not available. | Not available. |
| Sulfuric acid | Inhalation 160 mg/m ³ /4h, mouse | Oral 2140 mg/kg, rat |
| Lead Dioxide | Not available. | Not available. |

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| Lead sulfate | Not available. | Not available. |
|--|---|----------------------|
| Calculated overall Chemical Acute Toxicity Values | | |
| LC50 (inhalation) | LD50 (oral) | LD50 (dermal) |
| > 0.05 but ≤ 0.5 mg/l 4h, rat (Calculated using ATE values) | >300 but ≤2000 mg/kg | >200 but ≤1000 mg/kg |
| Ingredient | Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)* | |
| Lead, elemental | G-A3, I-2A (inorganic lead compounds), I-3 (organic lead compounds), N-2, CP65 | |
| Sulfuric acid | G-A2, I-1, CP65 (mists and vapours) | |
| Lead Dioxide | I-2A, N-2, CP65 | |
| Lead sulfate | G-A3, I-2A, N-2, CP65 | |

* See Section 15 for more information.

11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

- Skin Corrosion/Irritation:** Causes severe skin burns.
- Serious Eye Damage/Irritation:** Causes serious eye damage.
- Respiratory Sensitization:** Based on available data, the classification criteria are not met.
- Skin Sensitization:** Based on available data, the classification criteria are not met.
- STOT-Single Exposure:** Based on available data, the classification criteria are not met.
- Chronic Health Effects:**
 - Carcinogenicity:** May cause cancer.
 - Germ Cell Mutagenicity:** Hazardous by WHMIS criteria.
- Reproductive Toxicity:**
 - Developmental:** May damage the unborn child.
 - Teratogenicity:** Hazardous by WHMIS criteria.
 - Embryotoxicity:** Hazardous by WHMIS criteria.
 - Fertility:** May damage fertility.
- STOT-Repeated Exposure:** May cause damage to organs through prolonged or repeated exposure.
- Aspiration Hazard:** Based on available data, the classification criteria are not met.
- Toxicologically Synergistic Materials:** Not available.
- Other Information:** Not available.

Section 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

- Acute/Chronic Toxicity:** May cause long-term adverse effects in the aquatic environment.

12.2 PERSISTENCE AND DEGRADABILITY

Not available.

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12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available.

12.4 MOBILITY IN SOIL

Not available.

12.5 OTHER ADVERSE EFFECTS

Not available.

Section 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Disposal Method: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Other disposal recommendations: Not available.

Section 14: TRANSPORT INFORMATION

14.1 UN NUMBER

DOT
UN2794

TDG
UN2794

14.2 UN PROPER SHIPPING NAME

DOT
Batteries, Wet, Filled with Acid

TDG
BATTERIES, WET, FILLED WITH ACID

14.3 TRANSPORT HAZARD CLASS (ES)

DOT
8

TDG
8

14.4 PACKING GROUP

DOT
Not applicable.

TDG
Not applicable.

14.5 ENVIRONMENTAL HAZARDS

Not available.

14.6 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available.

14.7 SPECIAL PRECAUTIONS FOR USER

Not available.

Section 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

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US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

| SARA Title III | | | | |
|-----------------|------------------------------|---------------------------|------------------|--------------------------|
| Ingredient | Section 302 (EHS) TPQ (lbs.) | Section 304 EHS RQ (lbs.) | CERCLA RQ (lbs.) | Section 313 |
| Lead, elemental | Not listed. | Not listed. | 10 | 313 |
| Sulfuric acid | 1,000 | 1,000 | 1,000 | 313 (aerosol forms only) |
| Lead Dioxide | Not listed. | Not listed. | Not listed. | Not listed. |
| Lead sulfate | Not listed. | Not listed. | 10 | 313c |

State Regulations

California Proposition 65:

This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories:

| Ingredient | Canada DSL/NDSL | USA TSCA |
|-----------------|-----------------|----------|
| Lead, elemental | DSL | Yes. |
| Sulfuric acid | DSL | Yes. |
| Lead Dioxide | DSL | Yes. |
| Lead sulfate | DSL | Yes. |

NFPA National Fire Protection Association:

| | |
|-------------|---|
| Health: | 3 |
| Fire: | 0 |
| Reactivity: | 2 |

HMIS-Hazardous Materials Identification System

| | |
|------------------|----|
| Health: | 3* |
| Fire: | 0 |
| Physical Hazard: | 2 |

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme, [*] = chronic health effects

SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65 California Proposition 65

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

- A1 - Confirmed human carcinogen.
- A2 - Suspected human carcinogen.
- A3 - Animal carcinogen.
- A4 - Not classifiable as a human carcinogen.
- A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

- 1 - The agent (mixture) is carcinogenic to humans.
- 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

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NTP (N) **National Toxicology Program.**
1 - Known to be carcinogens.
2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Date of Preparation: November 27, 2015

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End of Safety Data Sheet