

GENERAL MOTORS CORP AC-DELCO DIV GOV'T ORDER DEPT -- ALL MODELS OF DELCO
BATTERIES,96687 -- 6115-01-237-4374

===== Product Identification =====

Product ID:ALL MODELS OF DELCO BATTERIES,96687

MSDS Date:11/24/1986

FSC:6115

NIIN:01-237-4374

MSDS Number: BSCZV

=== Responsible Party ===

Company Name:GENERAL MOTORS CORP AC-DELCO DIV GOV'T ORDER DEPT

Address:6060 W BRISTOL RD

City:FLINT

State:MI

ZIP:485

54

Country:US

Info Phone Num:313-635-5905

Emergency Phone Num:313-635-5905

Preparer's Name:ROBERT A. CHISMAN

CAGE:61928

=== Contractor Identification ===

Company Name:GENERAL MOTORS CORP AC-DELCO DIV

Address:6060 W BRISTOL RD

Box:City:FLINT

State:MI

ZIP:48554

Country:US

Phone:810-635-5905

CAGE:61928

Company Name:STEWART AND STEVENSON SERVICES INC.

Address:4516 HARRISBURG BLVD

Box:1637

City:HOUSTON

State:TX

ZIP:77251-4637

Country:US

Phone:713-923-2161

CAGE:81381

===== Composition/Inform

ation on Ingredients =====

Ingred Name:LEAD (SARA III)
CAS:7439-92-1
RTECS #:OF7525000
Fraction by Wt: 50%
Other REC Limits:100 UG/M3 (NIOSH)
OSHA PEL:0.05 MG/M3;1910.1025
ACGIH TLV:0.15 MG/M3;DUST 9293
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID (SARA III)
CAS:7664-93-9
RTECS #:WS5600000
Fraction by Wt: 37%
Other REC Limits:1 MG/M3 (NIOSH)
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9293
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

===== Hazards Identificatio
n =====

LD50 LC50 Mixture:TLV FOR SULFURIC ACID IS 1 MG/M3.
Routes of Entry: Inhalation:NO Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO
Health Hazards Acute and Chronic:ACUTE- LEAD MAY CAUSE GI UPSET,
DIARRHEA, CRAMPING & FATIGUE. SULFURIC ACID MAY CAUSE EYE, SKIN &
RESPIRATORY TRACT IRRITATION, BURNS, CORNEAL & LUNG DAMAGE.
CHRONIC- LEAD MAY CAUSE ANEMIA, KIDNEY & N ERVOUS SYSTEM DAMAGE.
ACID CAN CAUSE BRONCHITIS, EROSION OF TOO
TH ENAMEL. TARGET
ORGANS:EYES, SKIN, LUNGS, KIDNEY.
Explanation of Carcinogenicity:CONTAINS LEAD.
Effects of Overexposure:GI UPSET, LOSS OF APPETITE, DIARRHEA,
CONSTIPATION, CRAMPING, LACK OF SLEEP, FATIGUE, EYE, SKIN &
RESPIRATORY TRACT IRRITATION, BURNS, CORNEAL & LUNG DAMAGE
Medical Cond Aggravated by Exposure:INORGANIC LEAD AND ITS COMPOUNDS
CAN AGGRAVATE CHRONIC FORMS OF KIDNEY, LIVER AND NEUROLOGIC
DISEASES. CONTACT OF SULFURIC ACID WITH THE SKIN MAY AGGRAVATE SKIN

DISEASES SUCH AS ECZEMA AND DERMATITIS.

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===== First Aid Measures =====

First Aid:OBTAIN MEDICAL ATTENTION IN ALL CASES OF EXPOSURE.
EYES/SKIN:FLUSH WITH WATER FOR 15 MINUTES. KEEP EYELIDS OPEN.
INHALATION:MOVE TO FRESH AIR. INGESTION:DO NOT INDUCE VOMITING. IF
CONSCIOUS, DRINK MILK MIXED WITH EGG WHITES. CALL
PHYSICIAN IMMEDIATELY.

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===== Fire Fighting Measures =====

Flash Point:NON-FLAMMABLE
Extinguishing
Media:CARBON DIOXIDE, FOAM, OR DRY CHEMICAL. WATER SPRAY
MAY BE USED TO COOL FIRE-EXPOSED CONTAINER & DECREASE VAPORS.
Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND
NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL
FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.
Unusual Fire/Explosion Hazard:HYDROGEN GAS IS PRODUCED WHILE CHARGING.
KEEP AWAY SPARKS AND OTHER SOURCES OF IGNITION. SULFURIC ACID MAY
IGNITE COMBUSTIBLE MATERIALS.

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===== Accidental Release Measures =====

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENTS. REMOVE
COMBUSTIBLES & IGNITION SOURCES (H₂ MAY BE PRESENT). CONTAIN BY
DIKING AND COVER SPILL WITH SODA ASH OR QUICKLIME. MIX WELL. CHECK
THAT MIXTURE IS NEUTRAL. COLLECT AND PLACE IN A DRUM. DO NOT FLUSH
TO SEWER.
Neutralizing Agent:SODA ASH (SODIUM CARBONATE), QUICKLIME (CALCIUM
OXIDE)

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===== Handling and Storage =====

Handling and Storage Precautions:STORE NEAR EYEWASH FOUNTAIN AND SAFETY
SHOWER. STORAGE AREA SHOULD BE EQUIPPED WITH A DRAIN WHICH CAPTURES
SPILLS OF ACID FOR PROPER DISPOSAL.
Other Precautions:KEEP TERMINALS COVERED IN PLASTIC CASE. AVOID
SHORTING BATTERIES. DO NOT CRACK OR OVERCHARGE BATTERIES. KEEP
LIGHTED CIGARETTES, SPARKS, AND FLAMES AWAY FROM CHARGING
BATTERIES. KEEP OUT OF REACH OF CHILDREN.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:NOT REQUIRED

EQUIRED UNDER NORMAL USE. USE
NIOSH-APPROVED ACID-MIST FILTER RESPIRATOR IF 1 MG/M3 TWA IS
EXCEEDED (ACID).

Ventilation:ADEQUATE GENERAL VENTILATION

Protective Gloves:RUBBER

Eye Protection:SPLASH-PROOF CHEMICAL GOGGLES

Other Protective Equipment:RUBBER APRON AND BOOTS. EYES WASH STATION
AND SAFETY SHOWER. USE ACID-PROOF CLOTHING FOR MAJOR SPILLS.

Work Hygienic Practices:REMOVE METALLIC JEWELRY-SHOCK POTENTIAL. WASH
THOROUGHLY AFTER HANDLING AND BEFORE EATING AND DRINKING.

Supplem

ental Safety and Health

===== Physical/Chemical Properties =====

HCC:C1

NRC/State Lic Num:NOT RELEVANT

Spec Gravity:NOT RELEVANT

Evaporation Rate & Reference:NOT RELEVANT

Appearance and Odor:BATTERY

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, STRONG REDUCING AGENTS, MOST METALS, STRONG
BASES

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES, OVERCHARGING,
SMOK

ING, SPARKS

Hazardous Decomposition Products:OXIDES OF LEAD AND SULFUR, HYDROGEN,
SULFUR DIOXIDE AND SULFUR TRIOXIDE

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE AS HAZARDOUS WASTE. OBSERVE ALL FEDERAL,
STATE AND LOCAL ENVIRONMENTAL REGULATIONS FOR ACID OR LEAD SCRAP.
SEND BATTERIES TO LEAD SMELTER FOR RECLAMATION FOLLOWING APPLICABLE
FEDERAL, STATE AN D LOCAL REGULATIONS.

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